

$$Ans1 = \begin{bmatrix} .1 = \left(\arccos(0) = \frac{\pi}{2}\right) & .2 = \left(\arcsin(1) = \frac{\pi}{2}\right) & .3 = \left(\arccos\left(-\frac{\sqrt{3}}{2}\right) = \frac{5\pi}{6}\right) \\ .4 = (\arctan(0) = 0) & .5 = \left(\arcsin\left(-\frac{\sqrt{2}}{2}\right) = -\frac{\pi}{4}\right) & .6 = (\arccos(3) = \text{undefined}) \\ .7 = \left(\arcsin\left(\frac{1}{2}\right) = \frac{\pi}{6}\right) & .8 = \left(\arctan(1) = \frac{\pi}{4}\right) & .9 = \left(\arccos\left(\frac{\sqrt{3}}{2}\right) = \frac{\pi}{6}\right) \end{bmatrix},$$

$$\text{Ans2} = \left[\begin{array}{lll} .1 = (\tan(\arctan(-1))) = -1 & .2 = \left(\tan\left(\arcsin\left(\frac{-1}{2}\right)\right) = -\frac{\sqrt{3}}{3} \right) & .3 = \left(\sin\left(\arccos\left(\frac{1}{2}\right)\right) = \frac{\sqrt{3}}{2} \right) \\ .4 = \left(\cos\left(\arcsin\left(\frac{1}{2}\right)\right) = \frac{\sqrt{3}}{2} \right) & .5 = \left(\arccos\left(\cos\left(\frac{2\pi}{3}\right)\right) = \frac{2\pi}{3} \right) & .6 = \left(\arcsin\left(\cos\left(\frac{\pi}{3}\right)\right) = \frac{\pi}{6} \right) \\ .7 = \left(\arcsin\left(\sin\left(\frac{17\pi}{6}\right)\right) = \frac{\pi}{6} \right) & .8 = \left(\arccos\left(\cos\left(\frac{13\pi}{3}\right)\right) = \frac{\pi}{3} \right) & .9 = \left(\arctan\left(\tan\left(-\frac{5\pi}{6}\right)\right) = \frac{\pi}{6} \right) \\ .10 = \left(\sec\left(\arcsin\left(-\frac{\sqrt{3}}{2}\right)\right) = 2 \right) & .11 = \left(\tan\left(\arcsin\left(\cos\left(-\frac{2\pi}{3}\right)\right)\right) = -\frac{\sqrt{3}}{3} \right) & .12 = \left(\arccos\left(\sin\left(\arccos\left(-\frac{\sqrt{3}}{2}\right)\right)\right) = \frac{\pi}{3} \right) \end{array} \right]$$

$$Ans3 = \left[\begin{array}{lll} 1. = \left(\csc \left(\arcsin \left(-\frac{\sqrt{2}}{7} \right) \right) \right) = -\frac{7\sqrt{2}}{2} & 2. = \left(\sin \left(\arctan(-4) \right) \right) = -\frac{4\sqrt{17}}{17} & 3. = \left(\tan \left(\arccos \left(-\frac{\sqrt{5}}{7} \right) \right) \right) = -\frac{2\sqrt{11}\sqrt{5}}{5} \\ 4. = \left(\cos \left(\arctan \left(\frac{7}{4} \right) \right) \right) = \frac{4\sqrt{65}}{65} & 5. = \left(\tan \left(\arcsin \left(\frac{-1}{2} \right) \right) \right) = -\frac{\sqrt{3}}{3} & 6. = \left(\cot \left(\arctan \left(\frac{\sqrt{7}}{3} \right) \right) \right) = \frac{3\sqrt{7}}{7} \\ 7. = \left(\sec \left(\arccos \left(\frac{-4}{9} \right) \right) \right) = \frac{-9}{4} & 8. = \left(\sin \left(\arccos \left(\frac{1}{5} \right) \right) \right) = \frac{2\sqrt{6}}{5} & 9. = \left(\cos \left(\arcsin \left(\frac{5}{7} \right) \right) \right) = \frac{2\sqrt{6}}{7} \end{array} \right]$$

$$Ans4 = \left[\begin{array}{ll} .1 = \left(\sin \left(\arccos \left(\frac{1}{5} \right) + \arcsin \left(\frac{-1}{2} \right) \right) = \frac{\sqrt{6} \sqrt{3}}{5} - \frac{1}{10} \right. & .2 = \left(\cos \left(\arccos \left(\frac{1}{6} \right) + \arcsin \left(\frac{2}{5} \right) \right) = \frac{\sqrt{21}}{30} - \frac{\sqrt{35}}{15} \right) \\ .3 = \left(\sin \left(2 \arcsin \left(\frac{1}{2} \right) \right) = \frac{\sqrt{3}}{2} \right) & .4 = \left(\cos \left(2 \arcsin \left(\frac{5}{7} \right) \right) = \frac{-1}{49} \right) \\ .5 = \left(\arctan \left(\cos (5 \pi) + \sin \left(-\frac{15 \pi}{2} \right) \right) = 0 \right) & .6 = \left(\cot \left(\arccos \left(\sin \left(\frac{7 \pi}{6} \right) \right) + \arcsin \left(\cos \left(\frac{7 \pi}{3} \right) \right) \right) = -\sqrt{3} \right) \end{array} \right]$$

$$Ans5 = 2 \alpha \sqrt{1 - \alpha^2}, \quad \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$Ans6 = 2\alpha^2 - 1, \quad \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$Ans1 = \left[\begin{array}{lll} .1 = \left(\arccos\left(\frac{\sqrt{3}}{2}\right) = \frac{\pi}{6} \right) & .2 = \left(\arcsin\left(\frac{-1}{2}\right) = -\frac{\pi}{6} \right) & .3 = (\arccos(1) = 0) \\ .4 = \left(\arcsin\left(\frac{1}{2}\right) = \frac{\pi}{6} \right) & .5 = (\arccos(2) = \text{undefined}) & .6 = (\arctan(0) = 0) \\ .7 = \left(\arccos\left(-\frac{\sqrt{3}}{2}\right) = \frac{5\pi}{6} \right) & .8 = (\arcsin(0) = 0) & .9 = \left(\arctan(1) = \frac{\pi}{4} \right) \end{array} \right], \left[\begin{array}{l} M \\ a \\ t \\ h \\ @ \\ M \\ U \\ T \end{array} \right]$$

$$\text{Ans2} = \left[\begin{array}{lll} 1. = \left(\sin \left(\arcsin \left(\sin \left(-\frac{\sqrt{3}}{2} \right) \right) \right) = -\frac{\sqrt{3}}{2} \right) & 2. = \left(\cos \left(\arcsin \left(\frac{1}{2} \right) \right) = \frac{\sqrt{3}}{2} \right) & 3. = \left(\sin \left(\arccos \left(-\frac{\sqrt{3}}{2} \right) \right) = \frac{1}{2} \right) \\ 4. = \left(\tan \left(\arccos \left(\frac{\sqrt{2}}{2} \right) \right) = 1 \right) & 5. = \left(\arccos \left(\cos \left(\frac{5\pi}{6} \right) \right) = \frac{5\pi}{6} \right) & 6. = \left(\arccos \left(\sin \left(\frac{\pi}{3} \right) \right) = \frac{\pi}{6} \right) \\ 7. = \left(\arcsin \left(\sin \left(-\frac{11\pi}{6} \right) \right) = \frac{\pi}{6} \right) & 8. = \left(\arccos \left(\cos \left(-\frac{5\pi}{6} \right) \right) = \frac{5\pi}{6} \right) & 9. = \left(\arctan \left(\tan \left(\frac{17\pi}{6} \right) \right) = -\frac{\pi}{6} \right) \\ 10. = \left(\csc \left(\arctan \left(-\frac{\sqrt{3}}{3} \right) \right) = -2 \right) & 11. = \left(\sec \left(\arccos \left(\sin \left(\frac{13\pi}{6} \right) \right) \right) = 2 \right) & 12. = \left(\arccos \left(\sin \left(\arccos \left(-\frac{1}{2} \right) \right) \right) = \frac{\pi}{6} \right) \end{array} \right]$$

$$Ans3 = \left[\begin{array}{lll} .1 = \left(\sin \left(\arccos \left(\frac{1}{3} \right) \right) = \frac{2\sqrt{2}}{3} \right) & .2 = \left(\cot \left(\arctan \left(\frac{\sqrt{7}}{3} \right) \right) = \frac{3\sqrt{7}}{7} \right) & .3 = \left(\tan \left(\arcsin \left(\frac{3}{5} \right) \right) = \frac{3}{4} \right) \\ .4 = \left(\csc \left(\arccos \left(\frac{-5}{8} \right) \right) = \frac{8\sqrt{39}}{39} \right) & .5 = \left(\sin \left(\arctan \left(\frac{-4}{7} \right) \right) = -\frac{4\sqrt{65}}{65} \right) & .6 = \left(\cos \left(\arctan \left(\frac{7}{3} \right) \right) = \frac{3\sqrt{58}}{58} \right) \\ .7 = \left(\sec \left(\arcsin \left(\frac{-4}{5} \right) \right) = \frac{5}{3} \right) & .8 = \left(\tan \left(\arccos \left(-\frac{\sqrt{3}}{8} \right) \right) = -\frac{\sqrt{61}\sqrt{3}}{3} \right) & .9 = \left(\cos \left(\arcsin \left(-\frac{\sqrt{5}}{7} \right) \right) = \frac{2\sqrt{11}}{7} \right) \end{array} \right]$$

$$Ans4 = \left[\begin{array}{ll} .1 = \left(\sin \left(\arccos \left(\frac{1}{5} \right) + \arcsin \left(\frac{-3}{8} \right) \right) = \frac{\sqrt{6}\sqrt{55}}{20} - \frac{3}{40} \right) & .2 = \left(\cos \left(\arccos \left(\frac{3}{7} \right) + \arcsin \left(\frac{1}{2} \right) \right) = \frac{3\sqrt{3}}{14} - \frac{\sqrt{10}}{7} \right) \\ .3 = \left(\sin \left(2 \arcsin \left(\frac{3}{5} \right) \right) = \frac{24}{25} \right) & .4 = \left(\cos \left(2 \arcsin \left(\frac{2}{3} \right) \right) = \frac{1}{9} \right) \\ .5 = \left(\arctan \left(\tan \left(\frac{\pi}{2} \right) + \sin \left(-\frac{9\pi}{2} \right) \right) = -\frac{\pi}{4} \right) & .6 = \left(\csc \left(\arccos \left(\sin \left(-\frac{13\pi}{6} \right) \right) + \arcsin \left(\cos \left(\frac{7\pi}{3} \right) \right) \right) = 2 \right) \end{array} \right]$$

$$Ans5 = 2 \alpha \sqrt{1 - \alpha^2}, \quad \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$Ans6 = 1 - 2 \alpha^2, \quad , \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$Ans1 = \begin{bmatrix} .1 = \left(\arccos\left(\frac{\sqrt{2}}{2}\right) = \frac{\pi}{4}\right) & .2 = \left(\arcsin\left(\frac{1}{2}\right) = \frac{\pi}{6}\right) & .3 = \left(\arctan\left(\frac{\sqrt{3}}{3}\right) = \frac{\pi}{6}\right) \\ .4 = (\arccos(1) = 0) & .5 = \left(\arccos\left(-\frac{\sqrt{2}}{2}\right) = \frac{3\pi}{4}\right) & .6 = (\arcsin(0) = 0) \\ .7 = (\arctan(0) = 0) & .8 = (\arccos(-\sqrt{3}) = undefined) & .9 = \left(\arcsin\left(\frac{-1}{2}\right) = -\frac{\pi}{6}\right) \end{bmatrix},$$

$$\text{Ans2} = \left[\begin{array}{lll} .1 = \left(\cos \left(\arccos \left(-\frac{\sqrt{2}}{2} \right) \right) = -\frac{\sqrt{2}}{2} \right) & .2 = \left(\cos \left(\arcsin \left(\frac{1}{2} \right) \right) = \frac{\sqrt{3}}{2} \right) & .3 = \left(\tan \left(\arcsin \left(\frac{-1}{2} \right) \right) = -\frac{\sqrt{3}}{3} \right) \\ .4 = \left(\sin \left(\arctan \left(\frac{\sqrt{3}}{3} \right) \right) = \frac{1}{2} \right) & .5 = \left(\arccos \left(\cos \left(\frac{\pi}{3} \right) \right) = \frac{\pi}{3} \right) & .6 = \left(\arcsin \left(\cos \left(\frac{\pi}{4} \right) \right) = \frac{\pi}{4} \right) \\ .7 = \left(\arcsin \left(\sin \left(\frac{13\pi}{6} \right) \right) = \frac{\pi}{6} \right) & .8 = \left(\arccos \left(\cos \left(-\frac{\pi}{4} \right) \right) = \frac{\pi}{4} \right) & .9 = \left(\arctan \left(\tan \left(-\frac{11\pi}{6} \right) \right) = \frac{\pi}{6} \right) \\ .10 = \left(\sec \left(\arcsin \left(\frac{\sqrt{2}}{2} \right) \right) = \sqrt{2} \right) & .11 = \left(\sec \left(\arccos \left(\sin \left(-\frac{11\pi}{6} \right) \right) \right) = 2 \right) & .12 = \left(\arccos \left(\sin \left(\arccos \left(\frac{1}{2} \right) \right) \right) = \frac{\pi}{6} \right) \end{array} \right]$$

$$Ans3 = \left[\begin{array}{lll} 1. = \left(\tan \left(\arccos \left(\frac{1}{3} \right) \right) \right) = -2\sqrt{2} & 2. = \left(\sin \left(\arccos \left(\frac{4}{5} \right) \right) \right) = \frac{3}{5} & 3. = \left(\cos \left(\arcsin \left(-\frac{\sqrt{5}}{7} \right) \right) \right) = \frac{2\sqrt{11}}{7} \\ 4. = \left(\cot \left(\arcsin \left(-\frac{3}{7} \right) \right) \right) = -\frac{2\sqrt{10}}{3} & 5. = \left(\tan \left(\arcsin \left(\frac{2}{7} \right) \right) \right) = \frac{2\sqrt{5}}{15} & 6. = \left(\sec \left(\arccos \left(\frac{\sqrt{3}}{4} \right) \right) \right) = \frac{4\sqrt{3}}{3} \\ 7. = \left(\sin \left(\arctan \left(-\frac{2}{3} \right) \right) \right) = -\frac{2\sqrt{13}}{13} & 8. = \left(\csc \left(\arctan \left(-\sqrt{3} \right) \right) \right) = -\frac{2\sqrt{3}}{3} & 9. = \left(\cos \left(\arctan \left(\frac{6}{7} \right) \right) \right) = \frac{7\sqrt{85}}{85} \end{array} \right]$$

$$Ans4 = \left[\begin{array}{ll} .1 = \left(\sin \left(\arccos \left(\frac{1}{2} \right) + \arcsin \left(\frac{1}{2} \right) \right) = 1 \right) & .2 = \left(\cos \left(\arccos \left(\frac{2}{3} \right) + \arcsin \left(\frac{-2}{3} \right) \right) = \frac{4\sqrt{5}}{9} \right) \\ .3 = \left(\sin \left(2 \arccos \left(\frac{3}{8} \right) \right) = \frac{3\sqrt{55}}{32} \right) & .4 = \left(\cos \left(2 \arccos \left(\sin \left(\frac{2}{7} \right) \right) \right) = \frac{41}{49} \right) \\ .5 = \left(\arctan \left(\cos(4\pi) + \sin \left(-\frac{\pi}{2} \right) \right) = 0 \right) & .6 = \left(\csc \left(\arccos \left(\sin \left(\frac{7\pi}{6} \right) \right) + \arcsin \left(\cos \left(\frac{13\pi}{3} \right) \right) \right) = 2 \right) \end{array} \right], \quad \left[\begin{array}{c} M \\ a \\ t \\ h \\ @ \\ M \\ U \end{array} \right]$$

$$Ans5 = 2 \alpha \sqrt{1 - \alpha^2}, \quad \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$Ans6 = 1 - 2 \alpha^2, \quad , \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$Ans1 = \left[\begin{array}{ccc} .1 = \left(\arccos\left(-\frac{\sqrt{2}}{2}\right) = \frac{3\pi}{4} \right) & .2 = (\arccos(-1) = \pi) & .3 = \left(\arcsin\left(\frac{-1}{2}\right) = -\frac{\pi}{6} \right) \\ .4 = (\arcsin(-\sqrt{3}) = \text{undefined}) & .5 = \left(\arcsin\left(\frac{1}{2}\right) = \frac{\pi}{6} \right) & .6 = \left(\arctan\left(-\frac{\sqrt{3}}{3}\right) = -\frac{\pi}{6} \right) \\ .7 = \left(\arccos\left(\frac{\sqrt{2}}{2}\right) = \frac{\pi}{4} \right) & .8 = \left(\arctan(\sqrt{3}) = \frac{\pi}{3} \right) & .9 = \left(\arcsin(1) = \frac{\pi}{2} \right) \end{array} \right],$$

$$\text{Ans2} = \left[\begin{array}{lll} .1 = \left(\sin \left(\arcsin \left(-\frac{\sqrt{3}}{2} \right) \right) \right) = -\frac{\sqrt{3}}{2} & .2 = \left(\sin \left(\arctan \left(\frac{\sqrt{3}}{3} \right) \right) \right) = \frac{1}{2} & .3 = \left(\tan \left(\arccos \left(-\frac{\sqrt{2}}{2} \right) \right) \right) = -1 \\ .4 = \left(\cos \left(\arcsin \left(\frac{-1}{2} \right) \right) \right) = \frac{\sqrt{3}}{2} & .5 = \left(\arcsin \left(\sin \left(\frac{\pi}{4} \right) \right) \right) = \frac{\pi}{4} & .6 = \left(\arcsin \left(\cos \left(\frac{\pi}{4} \right) \right) \right) = \frac{\pi}{4} \\ .7 = \left(\arcsin \left(\sin \left(\frac{13\pi}{6} \right) \right) \right) = \frac{\pi}{6} & .8 = \left(\arccos \left(\cos \left(-\frac{\pi}{4} \right) \right) \right) = \frac{\pi}{4} & .9 = \left(\arctan \left(\tan \left(-\frac{7\pi}{6} \right) \right) \right) = -\frac{\pi}{6} \\ .10 = \left(\csc \left(\arcsin \left(\frac{1}{2} \right) \right) \right) = 2 & .11 = \left(\cot \left(\arccos \left(\sin \left(-\frac{5\pi}{6} \right) \right) \right) \right) = -\frac{\sqrt{3}}{3} & .12 = \left(\arccos \left(\sin \left(\arccos \left(\frac{\sqrt{2}}{2} \right) \right) \right) \right) = \frac{\pi}{4} \end{array} \right]$$

$$Ans3 = \left[\begin{array}{lll} .1 = \left(\csc \left(\arcsin \left(\frac{\sqrt{3}}{7} \right) \right) = \frac{7\sqrt{3}}{3} \right) & .2 = \left(\cot \left(\arccos \left(\frac{\sqrt{2}}{5} \right) \right) = \frac{\sqrt{2}\sqrt{23}}{23} \right) & .3 = \left(\sec \left(\arctan \left(\sqrt{6} \right) \right) = \sqrt{7} \right) \\ .4 = \left(\cos \left(\arcsin \left(\frac{3}{7} \right) \right) = \frac{2\sqrt{10}}{7} \right) & .5 = \left(\sin \left(\arccos \left(\frac{-5}{6} \right) \right) = \frac{\sqrt{11}}{6} \right) & .6 = \left(\tan \left(\arccos \left(\frac{1}{3} \right) \right) = 2\sqrt{2} \right) \\ .7 = \left(\tan \left(\arcsin \left(\frac{-2}{7} \right) \right) = -\frac{2\sqrt{5}}{15} \right) & .8 = \left(\cos \left(\arctan \left(\frac{2}{5} \right) \right) = \frac{2\sqrt{29}}{29} \right) & .9 = \left(\sin \left(\arctan \left(4 \right) \right) = \frac{4\sqrt{17}}{17} \right) \end{array} \right],$$

$$Ans4 = \left[\begin{array}{ll} .1 = \left(\sin \left(\arccos \left(\frac{1}{2} \right) + \arcsin \left(\frac{5}{9} \right) \right) = \frac{\sqrt{3} \sqrt{14}}{9} + \frac{5}{18} \right) & .2 = \left(\cos \left(\arccos \left(\frac{1}{4} \right) + \arcsin \left(\frac{-2}{5} \right) \right) = \frac{\sqrt{21}}{20} + \frac{\sqrt{15}}{10} \right) \\ .3 = \left(\sin \left(2 \arccos \left(\frac{1}{6} \right) \right) = \frac{\sqrt{35}}{18} \right) & .4 = \left(\cos \left(2 \arccos \left(\frac{1}{5} \right) \right) = \frac{-23}{25} \right) \\ .5 = \left(\arctan \left(\cos(7\pi) + \sin \left(\frac{17\pi}{2} \right) \right) = 0 \right) & .6 = \left(\sec \left(\arccos \left(\sin \left(-\frac{11\pi}{6} \right) \right) + \arcsin \left(\cos \left(-\frac{2\pi}{3} \right) \right) \right) = \frac{2\sqrt{3}}{3} \right) \end{array} \right]$$

$$Ans5 = 2 \alpha \sqrt{1 - \alpha^2}, \quad \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$Ans6 = 2 \alpha^2 - 1, \quad , \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$Ans1 = \begin{bmatrix} .1 = \left(\arctan(-1) = -\frac{\pi}{4} \right) & .2 = \left(\arccos\left(\frac{\sqrt{2}}{2}\right) = \frac{\pi}{4} \right) & .3 = \left(\arccos(3) = \text{undefined} \right) \\ .4 = \left(\arcsin\left(\frac{1}{2}\right) = \frac{\pi}{6} \right) & .5 = \left(\arccos\left(-\frac{\sqrt{3}}{2}\right) = \frac{5\pi}{6} \right) & .6 = \left(\arccos(0) = \frac{\pi}{2} \right) \\ .7 = \left(\arctan(0) = 0 \right) & .8 = \left(\arcsin(1) = \frac{\pi}{2} \right) & .9 = \left(\arcsin\left(-\frac{1}{2}\right) = -\frac{\pi}{6} \right) \end{bmatrix}, \begin{bmatrix} M \\ a \\ t \\ h \\ @ \\ M \\ U \\ T \end{bmatrix}$$

$$\text{Ans2} = \left[\begin{array}{lll} .1 = \left(\sin \left(\arcsin \left(-\frac{\sqrt{2}}{2} \right) \right) \right) = -\frac{\sqrt{2}}{2} & .2 = \left(\tan \left(\arcsin \left(\frac{\sqrt{2}}{2} \right) \right) \right) = 1 & .3 = \left(\sin \left(\arccos \left(\frac{-1}{2} \right) \right) \right) = \frac{\sqrt{3}}{2} \\ .4 = \left(\cos \left(\arcsin \left(-\frac{\sqrt{3}}{2} \right) \right) \right) = \frac{1}{2} & .5 = \left(\arccos \left(\cos \left(\frac{3\pi}{4} \right) \right) \right) = \frac{3\pi}{4} & .6 = \left(\arcsin \left(\cos \left(\frac{\pi}{3} \right) \right) \right) = \frac{\pi}{6} \\ .7 = \left(\arcsin \left(\sin \left(-\frac{11\pi}{6} \right) \right) \right) = \frac{\pi}{6} & .8 = \left(\arccos \left(\cos \left(\frac{5\pi}{3} \right) \right) \right) = \frac{\pi}{3} & .9 = \left(\arctan \left(\tan \left(-\frac{13\pi}{6} \right) \right) \right) = -\frac{\pi}{6} \\ .10 = \left(\cot \left(\arctan(-1) \right) \right) = -1 & .11 = \left(\cot \left(\arcsin \left(\cos \left(-\frac{5\pi}{6} \right) \right) \right) \right) = -\frac{\sqrt{3}}{3} & .12 = \left(\arcsin \left(\cos \left(\arcsin \left(\frac{\sqrt{3}}{2} \right) \right) \right) \right) = \frac{\pi}{6} \end{array} \right]$$

$$Ans3 = \left[\begin{array}{ccc} .1 = \left(\tan \left(\arccos \left(\frac{-2}{7} \right) \right) = -\frac{3\sqrt{5}}{2} \right) & .2 = \left(\sin \left(\arccos \left(\frac{\sqrt{2}}{3} \right) \right) = \frac{\sqrt{7}}{3} \right) & .3 = \left(\sin \left(\arctan \left(\frac{-4}{3} \right) \right) = \frac{-4}{5} \right) \\ .4 = \left(\sec \left(\arctan \left(\frac{3}{2} \right) \right) = \frac{\sqrt{13}}{2} \right) & .5 = \left(\csc \left(\arccos \left(\frac{5}{6} \right) \right) = \frac{6\sqrt{11}}{11} \right) & .6 = \left(\tan \left(\arcsin \left(\frac{\sqrt{7}}{8} \right) \right) = \frac{\sqrt{7}\sqrt{57}}{57} \right) \\ .7 = \left(\cot \left(\arcsin \left(\frac{1}{4} \right) \right) = \sqrt{15} \right) & .8 = \left(\cos \left(\arcsin \left(\frac{-3}{8} \right) \right) = \frac{\sqrt{55}}{8} \right) & .9 = \left(\cos \left(\arctan \left(\frac{2}{3} \right) \right) = \frac{3\sqrt{11}}{11} \right) \end{array} \right], \left[\begin{array}{c} M \\ a \\ t \\ h \\ @ \\ M \\ U \\ T \end{array} \right]$$

$$Ans4 = \left[\begin{array}{ll} 1 = \left(\sin \left(\arccos \left(\frac{2}{5} \right) + \arcsin \left(\frac{-1}{2} \right) \right) = \frac{\sqrt{3} \sqrt{21}}{10} - \frac{1}{5} \right) & 2 = \left(\cos \left(\arccos \left(\frac{1}{2} \right) + \arcsin \left(\frac{3}{7} \right) \right) = \frac{\sqrt{10}}{7} - \frac{3\sqrt{3}}{14} \right) \\ 3 = \left(\sin \left(2 \arcsin \left(\frac{2}{3} \right) \right) = \frac{4\sqrt{5}}{9} \right) & 4 = \left(\cos \left(2 \arccos \left(\frac{2}{3} \right) \right) = \frac{-1}{9} \right) \\ 5 = \left(\arctan \left(\cos \left(4\pi \right) + \sin \left(-\frac{\pi}{2} \right) \right) = 0 \right) & 6 = \left(\sec \left(\arccos \left(\sin \left(-\frac{5\pi}{6} \right) \right) + \arcsin \left(\cos \left(-\frac{\pi}{3} \right) \right) \right) = -\frac{2\sqrt{3}}{3} \right) \end{array} \right]$$

$$Ans5 = 2 \alpha \sqrt{1 - \alpha^2}, \quad \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$Ans6 = 2\alpha^2 - 1, \quad \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$AnsI = \begin{bmatrix} .1 = \left(\arccos(0) = \frac{\pi}{2} \right) & .2 = \left(\arctan(-\sqrt{3}) = -\frac{\pi}{3} \right) & .3 = \left(\arcsin(-1) = -\frac{\pi}{2} \right) \\ .4 = \left(\arccos\left(\frac{1}{2}\right) = \frac{\pi}{3} \right) & .5 = \left(\arcsin\left(-\frac{\sqrt{2}}{2}\right) = -\frac{\pi}{4} \right) & .6 = \left(\arctan(1) = \frac{\pi}{4} \right) \\ .7 = \left(\arcsin\left(\frac{\sqrt{3}}{2}\right) = \frac{\pi}{3} \right) & .8 = \left(\arccos\left(\frac{-1}{2}\right) = \frac{2\pi}{3} \right) & .9 = (\arcsin(-3) = undefined) \end{bmatrix},$$

$$\text{Ans2} = \left[\begin{array}{lll} .1 = \left(\cos \left(\arccos \left(\frac{-1}{2} \right) \right) = \frac{-1}{2} \right) & .2 = \left(\sin \left(\arcsin \left(1 \right) \right) = \frac{\sqrt{2}}{2} \right) & .3 = \left(\cos \left(\arcsin \left(\frac{\sqrt{2}}{2} \right) \right) = \frac{\sqrt{2}}{2} \right) \\ .4 = \left(\tan \left(\arccos \left(\frac{\sqrt{3}}{2} \right) \right) = \frac{\sqrt{3}}{3} \right) & .5 = \left(\arcsin \left(\sin \left(\frac{\pi}{6} \right) \right) = \frac{\pi}{6} \right) & .6 = \left(\arccos \left(\sin \left(\frac{\pi}{3} \right) \right) = \frac{\pi}{6} \right) \\ .7 = \left(\arcsin \left(\sin \left(-\frac{5\pi}{6} \right) \right) = -\frac{\pi}{6} \right) & .8 = \left(\arccos \left(\cos \left(\frac{13\pi}{3} \right) \right) = \frac{\pi}{3} \right) & .9 = \left(\arctan \left(\tan \left(-\frac{17\pi}{6} \right) \right) = \frac{\pi}{6} \right) \\ .10 = \left(\csc \left(\arcsin \left(\frac{-1}{2} \right) \right) = -2 \right) & .11 = \left(\sec \left(\arcsin \left(\cos \left(-\frac{3\pi}{4} \right) \right) \right) = \sqrt{2} \right) & .12 = \left(\arccos \left(\sin \left(\arccos \left(\frac{1}{2} \right) \right) \right) = \frac{\pi}{6} \right) \end{array} \right]$$

$$\text{Ans 3} = \left[\begin{array}{lll} 1. = \left(\tan \left(\arccos \left(-\frac{\sqrt{3}}{4} \right) \right) = -\frac{\sqrt{13} \sqrt{3}}{3} \right) & 2. = \left(\sin (\arctan (5)) = \frac{5 \sqrt{26}}{26} \right) & 3. = \left(\sin \left(\arccos \left(\frac{5}{9} \right) \right) = \frac{2 \sqrt{14}}{9} \right) \\ 4. = \left(\tan \left(\arcsin \left(-\frac{\sqrt{5}}{7} \right) \right) = -\frac{\sqrt{11} \sqrt{5}}{22} \right) & 5. = \left(\cot \left(\arccos \left(-\frac{5}{8} \right) \right) = -\frac{5 \sqrt{39}}{39} \right) & 6. = \left(\csc \left(\arcsin \left(-\frac{3}{4} \right) \right) = -\frac{4}{3} \right) \\ 7. = \left(\cos \left(\arcsin \left(\frac{4}{9} \right) \right) = \frac{\sqrt{65}}{9} \right) & 8. = \left(\cos (\arctan (\sqrt{2})) = \frac{\sqrt{3}}{3} \right) & 9. = \left(\sec \left(\arctan \left(-\frac{5}{7} \right) \right) = \frac{\sqrt{74}}{7} \right) \end{array} \right]$$

$$Ans4 = \left[\begin{array}{ll} .1 = \left(\sin \left(\arccos \left(\frac{5}{7} \right) + \arcsin \left(\frac{-1}{2} \right) \right) = \frac{\sqrt{6}\sqrt{3}}{7} - \frac{5}{14} \right) & .2 = \left(\cos \left(\arccos \left(\frac{1}{5} \right) + \arcsin \left(\frac{2}{3} \right) \right) = \frac{\sqrt{5}}{15} - \frac{4\sqrt{6}}{15} \right) \\ .3 = \left(\sin 2 \arcsin \left(\frac{1}{6} \right) = \frac{\sqrt{35}}{18} \right) & .4 = \left(\cos 2 \arccos \left(\frac{5}{9} \right) = \frac{-31}{81} \right) \\ .5 = \left(\arctan \left(\cos \left(\frac{7\pi}{2} \right) + \sin \left(-\frac{11\pi}{2} \right) \right) = \frac{\pi}{4} \right) & .6 = \left(\csc \left(\arccos \left(\sin \left(\frac{17\pi}{6} \right) \right) + \arcsin \left(\cos \left(\frac{8\pi}{3} \right) \right) \right) = 2 \right) \end{array} \right]$$

$$Ans5 = 2 \alpha \sqrt{1 - \alpha^2}, \quad \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$Ans6 = 2\alpha^2 - 1, \quad , \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$Ans1 = \left[\begin{array}{lll} .1 = \left(\arccos\left(\frac{1}{2}\right) = \frac{\pi}{3} \right) & .2 = \left(\arcsin\left(\frac{\sqrt{3}}{2}\right) = \frac{\pi}{3} \right) & .3 = (\arcsin(\sqrt{2}) = undefined) \\ .4 = (\arctan(0) = 0) & .5 = (\arcsin(0) = 0) & .6 = (\arccos(1) = 0) \\ .7 = \left(\arccos\left(-\frac{1}{2}\right) = \frac{2\pi}{3} \right) & .8 = \left(\arctan(-\sqrt{3}) = -\frac{\pi}{3} \right) & .9 = \left(\arcsin\left(-\frac{\sqrt{3}}{2}\right) = -\frac{\pi}{3} \right) \end{array} \right], \quad \left[\begin{array}{c} M \\ a \\ t \\ h \\ @ \\ M \\ U \\ T \end{array} \right]$$

$$\text{Ans2} = \left[\begin{array}{lll} .1 = (\tan(\arctan(1))) = 1 & .2 = \left(\tan\left(\arccos\left(\frac{-1}{2}\right)\right) = -\sqrt{3} \right) & .3 = \left(\cos\left(\arctan\left(\frac{\sqrt{3}}{3}\right)\right) = \frac{\sqrt{3}}{2} \right) \\ .4 = \left(\sin\left(\arctan\left(-\frac{\sqrt{3}}{3}\right)\right) = \frac{-1}{2} \right) & .5 = \left(\arcsin\left(\sin\left(-\frac{\pi}{4}\right)\right) = -\frac{\pi}{4} \right) & .6 = \left(\arccos\left(\sin\left(\frac{\pi}{4}\right)\right) = \frac{\pi}{4} \right) \\ .7 = \left(\arcsin\left(\sin\left(-\frac{17\pi}{6}\right)\right) = -\frac{\pi}{6} \right) & .8 = \left(\arccos\left(\cos\left(\frac{7\pi}{3}\right)\right) = \frac{\pi}{3} \right) & .9 = \left(\arctan\left(\tan\left(-\frac{7\pi}{6}\right)\right) = -\frac{\pi}{6} \right) \\ .10 = \left(\csc\left(\arccos\left(\frac{1}{2}\right)\right) = \frac{2\sqrt{3}}{3} \right) & .11 = \left(\tan\left(\arccos\left(\sin\left(\frac{13\pi}{6}\right)\right)\right) = \sqrt{3} \right) & .12 = \left(\arccos\left(\sin\left(\arccos\left(\frac{\sqrt{3}}{2}\right)\right)\right) = \frac{\pi}{3} \right) \end{array} \right]$$

$$Ans3 = \begin{bmatrix} .1 = \left(\cot(\arctan(-\sqrt{7})) = -\frac{\sqrt{7}}{7} \right) & .2 = \left(\sin\left(\arcsin\left(-\frac{\sqrt{3}}{8}\right)\right) = \frac{\sqrt{61}}{8} \right) & .3 = \left(\tan\left(\arcsin\left(\frac{-5}{8}\right)\right) = -\frac{5\sqrt{39}}{39} \right) \\ .4 = \left(\tan\left(\arcsin\left(\frac{4}{7}\right)\right) = \frac{\sqrt{33}}{4} \right) & .5 = \left(\csc\left(\arcsin\left(\frac{\sqrt{2}}{3}\right)\right) = \frac{3\sqrt{2}}{2} \right) & .6 = \left(\cos\left(\arcsin\left(\frac{5}{9}\right)\right) = \frac{2\sqrt{14}}{9} \right) \\ .7 = \left(\sin\left(\arctan\left(\frac{-5}{7}\right)\right) = -\frac{5\sqrt{74}}{74} \right) & .8 = \left(\cos\left(\arctan\left(\frac{7}{6}\right)\right) = \frac{6\sqrt{85}}{85} \right) & .9 = \left(\sec\left(\arcsin\left(\frac{-4}{5}\right)\right) = \frac{-5}{4} \right) \end{bmatrix}$$

$$Ans4 = \left[\begin{array}{ll} .1 = \left(\sin \left(\arccos \left(\frac{4}{5} \right) + \arcsin \left(\frac{-1}{2} \right) \right) = \frac{3\sqrt{3}}{10} - \frac{2}{5} \right) & .2 = \left(\cos \left(\arccos \left(\frac{2}{3} \right) + \arcsin \left(\frac{2}{3} \right) \right) = 0 \right) \\ .3 = \left(\sin \left(2 \arcsin \left(\frac{1}{5} \right) \right) = \frac{4\sqrt{6}}{25} \right) & .4 = \left(\cos \left(2 \arcsin \left(\frac{1}{5} \right) \right) = \frac{23}{25} \right) \\ .5 = \left(\arctan \left(\cos \left(\frac{\pi}{2} \right) \right) + \sin \left(-\frac{9\pi}{2} \right) \right) = -\frac{\pi}{4} & .6 = \left(\cot \left(\arccos \left(\sin \left(\frac{7\pi}{6} \right) \right) + \arcsin \left(\cos \left(-\frac{\pi}{3} \right) \right) \right) = -\sqrt{3} \right) \end{array} \right]$$

$$Ans5 = 2 \alpha \sqrt{1 - \alpha^2}, \quad , \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$Ans6 = 1 - 2 \alpha^2, \quad , \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$Ans1 = \begin{bmatrix} .1 = \left(\arccos\left(\frac{-1}{2}\right) = \frac{2\pi}{3}\right) & .2 = \left(\arctan(-\sqrt{3}) = -\frac{\pi}{3}\right) & .3 = (\arccos(1) = 0) \\ .4 = (\arctan(0) = 0) & .5 = \left(\arccos\left(\frac{1}{2}\right) = \frac{\pi}{3}\right) & .6 = (\arcsin(0) = 0) \\ .7 = (\arcsin(-\sqrt{2}) = \text{undefined}) & .8 = \left(\arcsin\left(-\frac{\sqrt{2}}{2}\right) = -\frac{\pi}{4}\right) & .9 = \left(\arcsin\left(\frac{\sqrt{2}}{2}\right) = \frac{\pi}{4}\right) \end{bmatrix}, \begin{bmatrix} M \\ a \\ t \\ h \\ @ \\ M \\ U \end{bmatrix}$$

$$\text{Ans2} = \left[\begin{array}{lll} .1 = \left(\sin \left(\arcsin \left(-\frac{\sqrt{2}}{2} \right) \right) = -\frac{\sqrt{2}}{2} \right) & .2 = \left(\tan \left(\arcsin \left(-\frac{\sqrt{3}}{2} \right) \right) = -\sqrt{3} \right) & .3 = \left(\cos \left(\arcsin \left(\frac{\sqrt{3}}{2} \right) \right) = \frac{1}{2} \right) \\ .4 = \left(\sin \left(\arccos \left(-\frac{\sqrt{2}}{2} \right) \right) = \frac{\sqrt{2}}{2} \right) & .5 = \left(\arccos \left(\cos \left(\frac{\pi}{3} \right) \right) = \frac{\pi}{3} \right) & .6 = \left(\arcsin \left(\cos \left(\frac{2\pi}{3} \right) \right) = -\frac{\pi}{6} \right) \\ .7 = \left(\arcsin \left(\sin \left(-\frac{5\pi}{6} \right) \right) = -\frac{\pi}{6} \right) & .8 = \left(\arccos \left(\cos \left(-\frac{\pi}{3} \right) \right) = \frac{\pi}{3} \right) & .9 = \left(\arctan \left(\tan \left(-\frac{7\pi}{6} \right) \right) = -\frac{\pi}{6} \right) \\ .10 = \left(\csc \left(\arcsin \left(\frac{1}{2} \right) \right) = 2 \right) & .11 = \left(\csc \left(\arcsin \left(\cos \left(-\frac{2\pi}{3} \right) \right) \right) = -2 \right) & .12 = \left(\arcsin \left(\cos \left(\arcsin \left(\frac{1}{2} \right) \right) \right) = \frac{\pi}{3} \right) \end{array} \right]$$

$$Ans3 = \left[\begin{array}{lll} .1 = \left(\csc \left(\arcsin \left(\frac{-2}{3} \right) \right) = \frac{-3}{2} \right) & .2 = \left(\sin(\arctan(6)) = \frac{6\sqrt{37}}{37} \right) & .3 = \left(\tan \left(\arccos \left(\frac{\sqrt{5}}{9} \right) \right) = \frac{2\sqrt{19}\sqrt{5}}{5} \right) \\ .4 = \left(\sec \left(\arctan \left(\frac{-5}{3} \right) \right) = \frac{\sqrt{34}}{3} \right) & .5 = \left(\tan \left(\arcsin \left(\frac{\sqrt{3}}{8} \right) \right) = \frac{\sqrt{61}\sqrt{3}}{61} \right) & .6 = \left(\cot \left(\arccos \left(\frac{1}{5} \right) \right) = \frac{\sqrt{6}}{12} \right) \\ .7 = \left(\sin(\arccos \left(\frac{-2}{3} \right)) = \frac{\sqrt{5}}{3} \right) & .8 = \left(\cos \left(\arctan \left(-\frac{\sqrt{3}}{4} \right) \right) = \frac{4\sqrt{19}}{19} \right) & .9 = \left(\cos(\arcsin \left(\frac{\sqrt{11}}{6} \right)) = \frac{\sqrt{11}}{6} \right) \end{array} \right]$$

$$Ans4 = \left[\begin{array}{ll} .1 = \left(\sin \left(\arccos \left(\frac{1}{2} \right) + \arcsin \left(\frac{-1}{2} \right) \right) = \frac{1}{2} \right. & .2 = \left(\cos \left(\arccos \left(\frac{1}{2} \right) + \arcsin \left(\frac{1}{3} \right) \right) = \frac{\sqrt{2}}{3} - \frac{\sqrt{3}}{6} \right) \\ .3 = \left(\sin \left(2 \arccos \left(\frac{3}{5} \right) \right) = \frac{24}{25} \right. & .4 = \left(\cos \left(2 \arccos \left(\frac{4}{9} \right) \right) = \frac{-49}{81} \right) \\ .5 = \left(\arctan \left(\cos \left(3 \pi \right) + \sin \left(-2 \pi \right) \right) = -\frac{\pi}{4} \right. & .6 = \left(\sec \left(\arccos \left(\sin \left(\frac{13 \pi}{6} \right) \right) + \arcsin \left(\cos \left(\frac{4 \pi}{3} \right) \right) \right) = \frac{2 \sqrt{3}}{3} \right) \end{array} \right]$$

$$Ans5 = 2 \alpha \sqrt{1 - \alpha^2}, \quad \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$Ans6 = 2\alpha^2 - 1, \quad , \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$Ans I = \left[\begin{array}{lll} .1 = \left(\arcsin\left(-\frac{\sqrt{2}}{2}\right) = -\frac{\pi}{4} \right) & .2 = (\arccos(1) = 0) & .3 = \left(\arctan(-\sqrt{3}) = -\frac{\pi}{3} \right) \\ .4 = \left(\arcsin\left(\frac{1}{2}\right) = \frac{\pi}{6} \right) & .5 = (\arctan(0) = 0) & .6 = (\arcsin(0) = 0) \\ .7 = \left(\arccos\left(\frac{-1}{2}\right) = \frac{2\pi}{3} \right) & .8 = \left(\arccos\left(\frac{\sqrt{2}}{2}\right) = \frac{\pi}{4} \right) & .9 = (\arcsin(2) = undefined) \end{array} \right]$$

$$\text{Ans2} = \left[\begin{array}{lll} .1 = \left(\sin \left(\arcsin \left(\frac{\sqrt{2}}{2} \right) \right) \right) = \frac{\sqrt{2}}{2} & .2 = \left(\cos \left(\arcsin \left(-\frac{\sqrt{2}}{2} \right) \right) \right) = \frac{\sqrt{2}}{2} & .3 = \left(\sin \left(\arctan(\sqrt{3}) \right) \right) = \frac{\sqrt{3}}{2} \\ .4 = \left(\tan \left(\arcsin \left(\frac{1}{2} \right) \right) \right) = \frac{\sqrt{3}}{3} & .5 = \left(\arccos \left(\cos \left(\frac{2\pi}{3} \right) \right) \right) = \frac{2\pi}{3} & .6 = \left(\arccos \left(\sin \left(\frac{\pi}{3} \right) \right) \right) = \frac{\pi}{6} \\ .7 = \left(\arcsin \left(\sin \left(\frac{17\pi}{6} \right) \right) \right) = \frac{\pi}{6} & .8 = \left(\arccos \left(\cos \left(\frac{13\pi}{3} \right) \right) \right) = \frac{\pi}{3} & .9 = \left(\arctan \left(\tan \left(-\frac{11\pi}{6} \right) \right) \right) = \frac{\pi}{6} \\ .10 = \left(\csc \left(\arcsin \left(\frac{\sqrt{3}}{2} \right) \right) \right) = \frac{2\sqrt{3}}{3} & .11 = \left(\sec \left(\arccos \left(\sin \left(-\frac{17\pi}{6} \right) \right) \right) \right) = -2 & .12 = \left(\arccos \left(\sin \left(\arccos \left(-\frac{\sqrt{3}}{2} \right) \right) \right) \right) = \frac{\pi}{3} \end{array} \right]$$

$$Ans3 = \left[\begin{array}{lll} .1 = \left(\tan \left(\arccos \left(\frac{-2}{7} \right) \right) = -\frac{3\sqrt{5}}{2} \right) & .2 = \left(\cos \left(\arctan(-4) \right) = \frac{\sqrt{17}}{17} \right) & .3 = \left(\cos \left(\arcsin \left(\frac{-3}{8} \right) \right) = \frac{\sqrt{55}}{8} \right) \\ .4 = \left(\tan \left(\arcsin \left(\frac{5}{6} \right) \right) = \frac{5\sqrt{11}}{11} \right) & .5 = \left(\csc \left(\arcsin \left(\frac{\sqrt{3}}{5} \right) \right) = \frac{5\sqrt{3}}{3} \right) & .6 = \left(\cot \left(\arctan \left(\frac{1}{4} \right) \right) = 4 \right) \\ .7 = \left(\sec \left(\arccos \left(\frac{2}{3} \right) \right) = \frac{3}{2} \right) & .8 = \left(\sin \left(\arctan \left(-\frac{\sqrt{7}}{6} \right) \right) = -\frac{\sqrt{7}\sqrt{43}}{43} \right) & .9 = \left(\sin \left(\arccos \left(-\frac{\sqrt{2}}{5} \right) \right) = \frac{\sqrt{23}}{5} \right) \end{array} \right], \left[\begin{array}{c} M \\ a \\ t \\ h \\ @ \\ M \\ U \\ T \end{array} \right]$$

$$Ans4 = \left[\begin{array}{ll} .1 = \left(\sin \left(\arccos \left(\frac{5}{7} \right) + \arcsin \left(\frac{-1}{5} \right) \right) = \frac{19}{35} \right) & .2 = \left(\cos \left(\arccos \left(\frac{2}{3} \right) + \arcsin \left(\frac{2}{5} \right) \right) = \frac{2\sqrt{21}}{15} - \frac{2\sqrt{5}}{15} \right) \\ .3 = \left(\sin \left(2 \arcsin \left(\frac{3}{8} \right) \right) = \frac{3\sqrt{55}}{32} \right) & .4 = \left(\cos \left(2 \arccos \left(\frac{5}{9} \right) \right) = \frac{-31}{81} \right) \\ .5 = \left(\arctan \left(\cos \left(\frac{7\pi}{2} \right) + \sin \left(-\frac{11\pi}{2} \right) \right) = \frac{\pi}{4} \right) & .6 = \left(\cot \left(\arccos \left(\sin \left(-\frac{11\pi}{6} \right) \right) + \arcsin \left(\cos \left(\frac{8\pi}{3} \right) \right) \right) = \sqrt{3} \right) \end{array} \right]$$

$$Ans5 = 2 \alpha \sqrt{1 - \alpha^2}, \quad \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$Ans6 = 1 - 2\alpha^2, \quad , \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$Ans1 = \left[\begin{array}{lll} 1 = (\arctan(0) = 0) & 2 = \left(\arccos\left(\frac{-1}{2}\right) = \frac{2\pi}{3}\right) & 3 = (\arcsin(-7) = \text{undefined}) \\ 4 = \left(\arcsin(1) = \frac{\pi}{2}\right) & 5 = (\arccos(-1) = \pi) & 6 = \left(\arctan(-\sqrt{3}) = -\frac{\pi}{3}\right) \\ 7 = \left(\arcsin\left(\frac{1}{2}\right) = \frac{\pi}{6}\right) & 8 = \left(\arcsin\left(-\frac{\sqrt{2}}{2}\right) = -\frac{\pi}{4}\right) & 9 = \left(\arccos\left(\frac{\sqrt{3}}{2}\right) = \frac{\pi}{6}\right) \end{array} \right]$$

$$\text{Ans2} = \left[\begin{array}{lll} .1 = \left(\cos \left(\arccos \left(-\frac{\sqrt{3}}{2} \right) \right) \right) = -\frac{\sqrt{3}}{2} & .2 = \left(\tan \left(\arccos \left(\frac{1}{2} \right) \right) \right) = \sqrt{3} & .3 = \left(\sin \left(\arccos \left(\frac{\sqrt{3}}{2} \right) \right) \right) = \frac{1}{2} \\ .4 = \left(\cos \left(\arctan(1) \right) \right) = \frac{\sqrt{2}}{2} & .5 = \left(\arccos \left(\cos \left(\frac{2\pi}{3} \right) \right) \right) = \frac{2\pi}{3} & .6 = \left(\arccos \left(\sin \left(-\frac{\pi}{4} \right) \right) \right) = \frac{3\pi}{4} \\ .7 = \left(\arcsin \left(\sin \left(-\frac{17\pi}{6} \right) \right) \right) = -\frac{\pi}{6} & .8 = \left(\arccos \left(\cos \left(\frac{11\pi}{3} \right) \right) \right) = \frac{\pi}{3} & .9 = \left(\arctan \left(\tan \left(-\frac{11\pi}{6} \right) \right) \right) = \frac{\pi}{6} \\ .10 = \left(\csc \left(\arccos \left(\frac{\sqrt{2}}{2} \right) \right) \right) = \sqrt{2} & .11 = \left(\csc \left(\arccos \left(\sin \left(-\frac{13\pi}{6} \right) \right) \right) \right) = \frac{2\sqrt{3}}{3} & .12 = \left(\arcsin \left(\cos \left(\arcsin \left(-\frac{1}{2} \right) \right) \right) \right) = \frac{\pi}{3} \end{array} \right]$$

$$Ans3 = \left[\begin{array}{lll} .1 = \left(\tan \left(\arcsin \left(-\frac{\sqrt{3}}{7} \right) \right) = -\frac{\sqrt{3} \sqrt{46}}{46} & .2 = \left(\csc \left(\arctan \left(\frac{1}{5} \right) \right) = \sqrt{26} & .3 = \left(\cot \left(\arcsin \left(\frac{5}{6} \right) \right) = \frac{\sqrt{11}}{5} \right. \\ .4 = \left(\sin \left(\arctan \left(\frac{\sqrt{6}}{5} \right) \right) = \frac{\sqrt{6} \sqrt{31}}{31} & .5 = \left(\sin \left(\arccos \left(\frac{\sqrt{2}}{3} \right) \right) = \frac{\sqrt{7}}{3} & .6 = \left(\cos \left(\arcsin \left(-\frac{2}{5} \right) \right) = \frac{\sqrt{21}}{5} \right. \\ .7 = \left(\tan \left(\arccos \left(-\frac{2}{5} \right) \right) = -\frac{\sqrt{21}}{2} & .8 = \left(\sec \left(\arccos \left(\frac{9}{5} \right) \right) = \frac{9}{5} & .9 = \left(\cos \left(\arctan \left(\frac{1}{7} \right) \right) = \frac{7 \sqrt{2}}{10} \right] \end{array} \right. , \left[\begin{array}{c} M \\ a \\ t \\ h \\ @ \\ M \\ U \\ T \end{array} \right]$$

$$Ans4 = \left[\begin{array}{ll} .1 = \left(\sin \left(\arccos \left(\frac{1}{5} \right) + \arcsin \left(\frac{4}{7} \right) \right) = \frac{2\sqrt{6}\sqrt{33}}{35} + \frac{4}{35} \right) & .2 = \left(\cos \left(\arccos \left(\frac{1}{2} \right) + \arcsin \left(\frac{-1}{5} \right) \right) = \frac{\sqrt{6}}{5} + \frac{\sqrt{3}}{10} \right) \\ .3 = \left(\sin \left(2 \arcsin \left(\frac{2}{7} \right) \right) = \frac{12\sqrt{5}}{49} \right) & .4 = \left(\cos \left(2 \arcsin \left(\frac{2}{7} \right) \right) = \frac{41}{49} \right) \\ .5 = \left(\arctan \left(\cos(4\pi) + \sin \left(\frac{15\pi}{2} \right) \right) = 0 \right) & .6 = \left(\csc \left(\arccos \left(\sin \left(\frac{17\pi}{6} \right) \right) + \arcsin \left(\cos \left(\frac{8\pi}{3} \right) \right) \right) = 2 \right) \end{array} \right]$$

$$Ans5 = 2 \alpha \sqrt{1 - \alpha^2}, \quad \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$Ans6 = 1 - 2 \alpha^2, \quad , \quad \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$\begin{bmatrix} M \\ a \\ t \\ h \\ @ \\ M \\ U \\ T \end{bmatrix},$$

$$\left[\begin{array}{c} \frac{:)}{:(} \\ \left[\begin{array}{c} M \\ a \\ t \\ h \\ @ \\ M \\ U \\ T \end{array} \right] \end{array} \right]$$

$$\left[\begin{array}{c} M \\ a \\ t \\ h \\ @ \\ M \\ U \\ T \end{array} \right]$$

$$\left[\begin{array}{c} M \\ a \\ t \\ h \\ @ \\ M \\ U \\ T \end{array} \right],$$

$$, \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$, \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

*M
a
t
h
@
M
U
T*

$$\left[\begin{array}{c} \frac{\cdot}{\cdot} \\ \cdot \\ \left[\begin{array}{c} M \\ a \\ t \\ h \\ @ \\ M \\ U \\ T \end{array} \right] \\ \frac{\cdot}{\cdot} \end{array} \right]$$

$$\begin{bmatrix} M \\ a \\ t \\ h \\ @ \\ M \\ U \\ T \end{bmatrix},$$

$$\begin{bmatrix} M \\ a \\ t \\ h \\ @ \\ M \\ U \end{bmatrix},$$

$$, \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$, \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$Ans1 = \begin{bmatrix} .1 = \left(\arccos\left(-\frac{\sqrt{3}}{2}\right) = \frac{5\pi}{6} \right) & .2 = \left(\arccos\left(\frac{\sqrt{2}}{2}\right) = \frac{\pi}{4} \right) & .3 = (\arcsin(5) = \text{undefined}) \\ .4 = \left(\arcsin\left(-\frac{\sqrt{2}}{2}\right) = -\frac{\pi}{4} \right) & .5 = \left(\arcsin(1) = \frac{\pi}{2} \right) & .6 = \left(\arccos(0) = \frac{\pi}{2} \right) \\ .7 = \left(\arcsin\left(\frac{1}{2}\right) = \frac{\pi}{6} \right) & .8 = \left(\arctan(\sqrt{3}) = \frac{\pi}{3} \right) & .9 = \left(\arctan\left(-\frac{\sqrt{3}}{3}\right) = -\frac{\pi}{6} \right) \end{bmatrix}, \begin{bmatrix} M \\ a \\ t \\ h \\ @ \\ M \\ U \\ T \end{bmatrix}$$

$$\text{Ans2} = \left[\begin{array}{lll} .1 = \left(\cos \left(\arccos \left(\frac{\sqrt{2}}{2} \right) \right) = \frac{\sqrt{2}}{2} \right) & .2 = \left(\sin \left(\arctan(-1) \right) = -\frac{\sqrt{2}}{2} \right) & .3 = \left(\cos \left(\arcsin \left(\frac{\sqrt{3}}{2} \right) \right) = \frac{1}{2} \right) \\ .4 = \left(\tan \left(\arcsin \left(\frac{-1}{2} \right) \right) = -\frac{\sqrt{3}}{3} \right) & .5 = \left(\arctan \left(\tan \left(-\frac{\pi}{3} \right) \right) = -\frac{\pi}{3} \right) & .6 = \left(\arccos \left(\sin \left(\frac{\pi}{4} \right) \right) = \frac{\pi}{4} \right) \\ .7 = \left(\arcsin \left(\sin \left(\frac{13\pi}{6} \right) \right) = \frac{\pi}{6} \right) & .8 = \left(\arccos \left(\cos \left(\frac{11\pi}{3} \right) \right) = \frac{\pi}{3} \right) & .9 = \left(\arctan \left(\tan \left(\frac{5\pi}{6} \right) \right) = -\frac{\pi}{6} \right) \\ .10 = \left(\sec \left(\arccos \left(-\frac{\sqrt{2}}{2} \right) \right) = -\sqrt{2} \right) & .11 = \left(\cot \left(\arcsin \left(\cos \left(\frac{10\pi}{3} \right) \right) \right) = -\sqrt{3} \right) & .12 = \left(\arccos \left(\sin \left(\arccos \left(\frac{\sqrt{3}}{2} \right) \right) \right) = \frac{\pi}{3} \right) \end{array} \right]$$

$$Ans3 = \left[\begin{array}{lll} .1 = \left(\sin \left(\arccos \left(\frac{-5}{9} \right) \right) = \frac{2\sqrt{14}}{9} \right) & .2 = \left(\csc \left(\arcsin \left(\frac{-3}{7} \right) \right) = \frac{-7}{3} \right) & .3 = \left(\cos \left(\arctan(-7) \right) = \frac{\sqrt{2}}{10} \right) \\ .4 = \left(\cos \left(\arcsin \left(\frac{5}{8} \right) \right) = \frac{\sqrt{39}}{8} \right) & .5 = \left(\tan \left(\arcsin \left(-\frac{\sqrt{5}}{8} \right) \right) = -\frac{\sqrt{5}\sqrt{59}}{59} \right) & .6 = \left(\sec \left(\arctan \left(\frac{\sqrt{5}}{4} \right) \right) = \frac{\sqrt{21}}{4} \right) \\ .7 = \left(\tan \left(\arccos \left(\frac{1}{4} \right) \right) = \sqrt{15} \right) & .8 = \left(\cot \left(\arccos \left(-\frac{\sqrt{2}}{5} \right) \right) = -\frac{\sqrt{2}\sqrt{23}}{23} \right) & .9 = \left(\sin \left(\arctan \left(\frac{6}{5} \right) \right) = \frac{6\sqrt{61}}{61} \right) \end{array} \right], \quad \left[\begin{array}{c} M \\ a \\ t \\ h \\ @ \\ M \\ U \\ T \end{array} \right]$$

$$Ans4 = \left[\begin{array}{ll} .1 = \left(\sin \left(\arccos \left(\frac{1}{2} \right) + \arcsin \left(\frac{1}{2} \right) \right) = 1 \right. & .2 = \left(\cos \left(\arccos \left(\frac{1}{2} \right) + \arcsin \left(\frac{-5}{9} \right) \right) = \frac{\sqrt{14}}{9} + \frac{5\sqrt{3}}{18} \right) \\ .3 = \left(\sin \left(2 \arcsin \left(\frac{1}{4} \right) \right) = \frac{\sqrt{15}}{8} \right) & .4 = \left(\cos \left(2 \arccos \left(\frac{1}{3} \right) \right) = \frac{-7}{9} \right) \\ .5 = \left(\arctan \left(\cos(5\pi) + \sin(-4\pi) \right) = -\frac{\pi}{4} \right) & .6 = \left(\cot \left(\arccos \left(\sin \left(\frac{7\pi}{6} \right) \right) + \arcsin \left(\cos \left(\frac{7\pi}{3} \right) \right) \right) = -\sqrt{3} \right) \end{array} \right]$$

$$Ans5 = 2 \alpha \sqrt{1 - \alpha^2}, \quad \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$Ans6 = 2\alpha^2 - 1, \quad \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$Ans1 = \begin{bmatrix} .1 = \left(\arcsin\left(-\frac{\sqrt{2}}{2}\right) = -\frac{\pi}{4} \right) & .2 = (\arcsin(2) = \text{undefined}) & .3 = (\arccos(-1) = \pi) \\ .4 = (\arcsin(0) = 0) & .5 = \left(\arcsin\left(\frac{\sqrt{3}}{2}\right) = \frac{\pi}{3} \right) & .6 = \left(\arctan(-1) = -\frac{\pi}{4} \right) \\ .7 = \left(\arccos\left(-\frac{\sqrt{3}}{2}\right) = \frac{5\pi}{6} \right) & .8 = (\arctan(0) = 0) & .9 = \left(\arccos\left(\frac{1}{2}\right) = \frac{\pi}{3} \right) \end{bmatrix}, \begin{bmatrix} M \\ a \\ t \\ h \\ @ \\ M \\ U \\ T \end{bmatrix}$$

$$\text{Ans2} = \left[\begin{array}{lll} 1. = \left(\sin \left(\arcsin \left(\frac{\sqrt{3}}{2} \right) \right) = \frac{\sqrt{3}}{2} \right) & 2. = \left(\sin \left(\arccos \left(-\frac{\sqrt{3}}{2} \right) \right) = \frac{1}{2} \right) & 3. = \left(\cos \left(\arctan \left(\frac{\sqrt{3}}{3} \right) \right) = \frac{\sqrt{3}}{2} \right) \\ 4. = \left(\tan \left(\arccos \left(\frac{1}{2} \right) \right) = \sqrt{3} \right) & 5. = \left(\arcsin \left(\sin \left(\frac{\pi}{6} \right) \right) = \frac{\pi}{6} \right) & 6. = \left(\arcsin \left(\cos \left(\frac{5\pi}{6} \right) \right) = -\frac{\pi}{3} \right) \\ 7. = \left(\arcsin \left(\sin \left(-\frac{17\pi}{6} \right) \right) = -\frac{\pi}{6} \right) & 8. = \left(\arccos \left(\cos \left(-\frac{3\pi}{4} \right) \right) = \frac{3\pi}{4} \right) & 9. = \left(\arctan \left(\tan \left(\frac{17\pi}{6} \right) \right) = -\frac{\pi}{6} \right) \\ 10. = \left(\cot \left(\arcsin \left(-\frac{\sqrt{3}}{2} \right) \right) = -\frac{\sqrt{3}}{3} \right) & 11. = \left(\sec \left(\arccos \left(\sin \left(\frac{17\pi}{6} \right) \right) \right) = 2 \right) & 12. = \left(\arcsin \left(\cos \left(\arcsin \left(\frac{1}{2} \right) \right) \right) = \frac{\pi}{3} \right) \end{array} \right]$$

$$Ans3 = \left[\begin{array}{lll} .1 = \left(\cos \left(\arcsin \left(\frac{-1}{6} \right) \right) \right) = \frac{\sqrt{35}}{6} & .2 = \left(\sec \left(\arccos \left(\frac{2}{5} \right) \right) \right) = \frac{5}{2} & .3 = \left(\tan \left(\arccos \left(\frac{-3}{8} \right) \right) \right) = -\frac{\sqrt{55}}{3} \\ .4 = \left(\sin \left(\arccos \left(-\frac{\sqrt{5}}{8} \right) \right) \right) = \frac{\sqrt{59}}{8} & .5 = \left(\sin \left(\arctan \left(\frac{2}{7} \right) \right) \right) = \frac{2\sqrt{53}}{53} & .6 = \left(\csc \left(\arcsin \left(\frac{5}{9} \right) \right) \right) = \frac{9}{5} \\ .7 = \left(\cot \left(\arctan(-1) \right) \right) = -1 & .8 = \left(\tan \left(\arcsin \left(\frac{\sqrt{5}}{9} \right) \right) \right) = \frac{\sqrt{19}\sqrt{5}}{38} & .9 = \left(\cos \left(\arctan \left(-\frac{\sqrt{4}}{5} \right) \right) \right) = \frac{4\sqrt{21}}{21} \end{array} \right] \quad \left[\begin{array}{l} M \\ a \\ t \\ h \\ @ \\ M \\ U \\ T \end{array} \right]$$

$$Ans4 = \left[\begin{array}{ll} 1. = \left(\sin \left(\arccos \left(\frac{2}{5} \right) + \arcsin \left(\frac{1}{4} \right) \right) = \frac{\sqrt{21} \sqrt{15}}{20} + \frac{1}{10} \right) & 2. = \left(\cos \left(\arccos \left(\frac{2}{3} \right) + \arcsin \left(\frac{-2}{7} \right) \right) = \frac{8\sqrt{5}}{21} \right) \\ 3. = \left(\sin \left(2 \arccos \left(\frac{3}{5} \right) \right) = \frac{24}{25} \right) & 4. = \left(\cos \left(2 \arccos \left(\frac{3}{7} \right) \right) = \frac{-31}{49} \right) \\ 5. = \left(\arctan \left(\cos \left(\frac{7\pi}{2} \right) + \sin \left(-\frac{5\pi}{2} \right) \right) = -\frac{\pi}{4} \right) & 6. = \left(\cot \left(\arccos \left(\sin \left(-\frac{5\pi}{6} \right) \right) + \arcsin \left(\cos \left(-\frac{5\pi}{6} \right) \right) \right) = \frac{\sqrt{3}}{3} \right) \end{array} \right]$$

$$Ans5 = 2 \alpha \sqrt{1 - \alpha^2}, \quad \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$Ans6 = 1 - 2 \alpha^2, \quad , \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$Ans1 = \begin{bmatrix} .1 = \left(\arccos\left(\frac{1}{2}\right) = \frac{\pi}{3} \right) & .2 = \left(\arcsin(-1) = -\frac{\pi}{2} \right) & .3 = \left(\arccos\left(-\frac{\sqrt{2}}{2}\right) = \frac{3\pi}{4} \right) \\ .4 = \left(\arcsin\left(\frac{\sqrt{2}}{2}\right) = \frac{\pi}{4} \right) & .5 = \left(\arcsin\left(-\frac{1}{2}\right) = -\frac{\pi}{6} \right) & .6 = \left(\arctan\left(-\frac{\sqrt{3}}{3}\right) = -\frac{\pi}{6} \right) \\ .7 = \left(\arcsin(-\sqrt{2}) = undefined \right) & .8 = \left(\arctan(0) = 0 \right) & .9 = \left(\arccos(0) = \frac{\pi}{2} \right) \end{bmatrix}, \begin{bmatrix} M \\ a \\ t \\ h \\ @ \\ M \\ U \\ T \end{bmatrix}$$

$$\text{Ans2} = \left[\begin{array}{lll} 1. = \left(\sin \left(\arcsin \left(\frac{\sqrt{2}}{2} \right) \right) = \frac{\sqrt{2}}{2} \right) & 2. = \left(\sin \left(\arccos \left(\frac{\sqrt{3}}{2} \right) \right) = \frac{1}{2} \right) & 3. = \left(\tan \left(\arccos \left(-\frac{\sqrt{2}}{2} \right) \right) = -1 \right) \\ 4. = \left(\cos \left(\arcsin \left(-\frac{\sqrt{3}}{2} \right) \right) = \frac{1}{2} \right) & 5. = \left(\arctan \left(\tan \left(\frac{\pi}{4} \right) \right) = \frac{\pi}{4} \right) & 6. = \left(\arcsin \left(\cos \left(\frac{2\pi}{3} \right) \right) = -\frac{\pi}{6} \right) \\ 7. = \left(\arcsin \left(\sin \left(\frac{13\pi}{6} \right) \right) = \frac{\pi}{6} \right) & 8. = \left(\arccos \left(\cos \left(-\frac{2\pi}{3} \right) \right) = \frac{2\pi}{3} \right) & 9. = \left(\arctan \left(\tan \left(\frac{17\pi}{6} \right) \right) = -\frac{\pi}{6} \right) \\ 10. = \left(\sec \left(\arccos \left(\frac{1}{2} \right) \right) = 2 \right) & 11. = \left(\cot \left(\arcsin \left(\cos \left(\frac{10\pi}{3} \right) \right) \right) = -\sqrt{3} \right) & 12. = \left(\arccos \left(\sin \left(\arccos \left(\frac{-1}{2} \right) \right) \right) = \frac{\pi}{6} \right) \end{array} \right]$$

$$\text{Ans } 3 = \left[\begin{array}{lll} 1. = \left(\tan \left(\arccos \left(-\frac{\sqrt{7}}{8} \right) \right) = -\frac{\sqrt{7} \sqrt{57}}{7} \right) & 2. = \left(\tan \left(\arcsin \left(-\frac{\sqrt{5}}{9} \right) \right) = -\frac{\sqrt{19} \sqrt{5}}{38} \right) & 3. = \left(\sec \left(\arcsin \left(\frac{-4}{7} \right) \right) = \frac{7 \sqrt{33}}{33} \right) \\ 4. = \left(\cot \left(\arccos \left(\frac{-3}{7} \right) \right) = -\frac{3 \sqrt{10}}{20} \right) & 5. = \left(\sin \left(\arctan \left(-\sqrt{6} \right) \right) = -\frac{\sqrt{6} \sqrt{7}}{7} \right) & 6. = \left(\sin \left(\arccos \left(\frac{4}{7} \right) \right) = \frac{\sqrt{33}}{7} \right) \\ 7. = \left(\cos \left(\arctan \left(\frac{5}{4} \right) \right) = \frac{4 \sqrt{41}}{41} \right) & 8. = \left(\csc \left(\arctan \left(\frac{-4}{5} \right) \right) = -\frac{41}{4} \right) & 9. = \left(\cos \left(\arcsin \left(\frac{3}{5} \right) \right) = \frac{4}{5} \right) \end{array} \right]$$

$$Ans4 = \left[\begin{array}{ll} .1 = \left(\sin \left(\arccos \left(\frac{1}{6} \right) + \arcsin \left(\frac{-5}{8} \right) \right) = \frac{\sqrt{35} \sqrt{39}}{48} - \frac{5}{48} \right) & .2 = \left(\cos \left(\arccos \left(\frac{1}{4} \right) + \arcsin \left(\frac{2}{3} \right) \right) = \frac{\sqrt{5}}{12} - \frac{\sqrt{15}}{6} \right) \\ .3 = \left(\sin \left(2 \arcsin \left(\frac{2}{7} \right) \right) = \frac{12 \sqrt{5}}{49} \right) & .4 = \left(\cos \left(2 \arcsin \left(\frac{2}{3} \right) \right) = \frac{1}{9} \right) \\ .5 = \left(\arctan \left(\cos(\pi) + \sin \left(-\frac{19 \pi}{2} \right) \right) = 0 \right) & .6 = \left(\csc \left(\arccos \left(\sin \left(\frac{11 \pi}{6} \right) \right) + \arcsin \left(\cos \left(-\frac{\pi}{3} \right) \right) \right) = 2 \right) \end{array} \right] \left[\begin{array}{c} M \\ a \\ t \\ h \\ @ \\ M \\ U \\ T \end{array} \right]$$

$$Ans5 = 2 \alpha \sqrt{1 - \alpha^2}, \quad \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$Ans6 = 1 - 2 \alpha^2, \quad \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$AnsI = \begin{bmatrix} .1 = \left(\arcsin\left(\frac{\sqrt{2}}{2}\right) = \frac{\pi}{4} \right) & .2 = \left(\arctan(\sqrt{3}) = \frac{\pi}{3} \right) & .3 = \left(\arccos(0) = \frac{\pi}{2} \right) \\ .4 = \left(\arcsin(-1) = -\frac{\pi}{2} \right) & .5 = \left(\arcsin(5) = \text{undefined} \right) & .6 = \left(\arctan(-1) = -\frac{\pi}{4} \right) \\ .7 = \left(\arccos\left(-\frac{\sqrt{3}}{2}\right) = \frac{5\pi}{6} \right) & .8 = \left(\arcsin\left(\frac{-1}{2}\right) = -\frac{\pi}{6} \right) & .9 = \left(\arccos\left(\frac{1}{2}\right) = \frac{\pi}{3} \right) \end{bmatrix}, \begin{bmatrix} M \\ a \\ t \\ h \\ @ \\ M \\ U \end{bmatrix}$$

$$\text{Ans2} = \left[\begin{array}{lll} 1. = \left(\sin \left(\arcsin \left(\frac{\sqrt{3}}{2} \right) \right) = \frac{\sqrt{3}}{2} \right) & 2. = \left(\cos \left(\arcsin \left(-\frac{\sqrt{3}}{2} \right) \right) = \frac{1}{2} \right) & 3. = \left(\tan \left(\arcsin \left(-\frac{\sqrt{2}}{2} \right) \right) = -1 \right) \\ 4. = \left(\sin \left(\arctan(1) \right) = \frac{\sqrt{2}}{2} \right) & 5. = \left(\arccos \left(\cos \left(\frac{\pi}{4} \right) \right) = \frac{\pi}{4} \right) & 6. = \left(\arccos \left(\sin \left(\frac{\pi}{3} \right) \right) = \frac{\pi}{6} \right) \\ 7. = \left(\arcsin \left(\sin \left(-\frac{13\pi}{6} \right) \right) = -\frac{\pi}{6} \right) & 8. = \left(\arccos \left(\cos \left(-\frac{\pi}{3} \right) \right) = \frac{\pi}{3} \right) & 9. = \left(\arctan \left(\tan \left(-\frac{17\pi}{6} \right) \right) = \frac{\pi}{6} \right) \\ 10. = \left(\csc \left(\arccos \left(-\frac{\sqrt{2}}{2} \right) \right) = \sqrt{2} \right) & 11. = \left(\csc \left(\arccos \left(\sin \left(\frac{17\pi}{6} \right) \right) \right) = \frac{2\sqrt{3}}{3} \right) & 12. = \left(\arcsin \left(\cos \left(\arcsin \left(\frac{1}{2} \right) \right) \right) = \frac{\pi}{3} \right) \end{array} \right]$$

$$Ans3 = \left[\begin{array}{lll} 1 = \left(\tan \left(\arccos \left(\frac{\sqrt{5}}{7} \right) \right) = \frac{2\sqrt{11}\sqrt{5}}{5} & 2 = \left(\sec \left(\arccos \left(\frac{-1}{3} \right) \right) = -3 & 3 = \left(\csc \left(\arcsin \left(\frac{\sqrt{5}}{7} \right) \right) = \frac{7\sqrt{5}}{5} \right. \\ 4 = \left(\sin \left(\arctan \left(\frac{\sqrt{5}}{7} \right) \right) = -\frac{\sqrt{5}\sqrt{6}}{18} & 5 = \left(\cos \left(\arcsin \left(\frac{3}{5} \right) \right) = \frac{4}{5} & 6 = \left(\cot \left(\arctan(7) \right) = \frac{1}{7} \right. \\ 7 = \left(\cos \left(\arctan \left(\frac{-1}{3} \right) \right) = \frac{3\sqrt{10}}{10} & 8 = \left(\sin \left(\arccos \left(\frac{4}{9} \right) \right) = \sqrt{\frac{65}{9}} & 9 = \left(\tan \left(\arcsin \left(\frac{-1}{4} \right) \right) = -\frac{\sqrt{15}}{15} \right] \end{array} \right.$$

$$Ans4 = \left[\begin{array}{ll} .1 = \left(\sin \left(\arccos \left(\frac{1}{3} \right) + \arcsin \left(\frac{-2}{3} \right) \right) = \frac{2\sqrt{2}\sqrt{5}}{9} - \frac{2}{9} \right) & .2 = \left(\cos \left(\arccos \left(\frac{2}{5} \right) + \arcsin \left(\frac{3}{7} \right) \right) = \frac{4\sqrt{10}}{35} - \frac{3\sqrt{21}}{35} \right) \\ .3 = \left(\sin \left(2 \arcsin \left(\frac{3}{5} \right) \right) = \frac{24}{25} \right) & .4 = \left(\cos \left(2 \arccos \left(\frac{5}{6} \right) \right) = \frac{7}{18} \right) \\ .5 = \left(\arctan \left(\cos(\pi) + \sin(-2\pi) \right) = -\frac{\pi}{4} \right) & .6 = \left(\csc \left(\arccos \left(\sin \left(-\frac{11\pi}{6} \right) \right) + \arcsin \left(\cos \left(-\frac{\pi}{6} \right) \right) \right) = \frac{2\sqrt{3}}{3} \right) \end{array} \right]$$

$$Ans5 = 2 \alpha \sqrt{1 - \alpha^2}, \quad \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$Ans6 = 2\alpha^2 - 1, \quad , \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$Ans1 = \left[\begin{array}{lll} .1 = (\arccos(-1) = \pi) & .2 = (\arcsin(0) = 0) & .3 = \left(\arctan(-1) = -\frac{\pi}{4} \right) \\ .4 = (\arcsin(7) = \text{undefined}) & .5 = \left(\arccos\left(\frac{\sqrt{3}}{2}\right) = \frac{\pi}{6} \right) & .6 = \left(\arcsin\left(\frac{\sqrt{2}}{2}\right) = \frac{\pi}{4} \right) \\ .7 = \left(\arctan\left(\frac{\sqrt{3}}{3}\right) = \frac{\pi}{6} \right) & .8 = \left(\arccos\left(-\frac{\sqrt{3}}{2}\right) = \frac{5\pi}{6} \right) & .9 = \left(\arcsin\left(-\frac{1}{2}\right) = -\frac{\pi}{6} \right) \end{array} \right],$$

$$\text{Ans2} = \left[\begin{array}{lll} .1 = \left(\cos \left(\arccos \left(\frac{\sqrt{2}}{2} \right) \right) = \frac{\sqrt{2}}{2} \right) & .2 = \left(\cos \left(\arccos \tan(-1) \right) = \frac{\sqrt{2}}{2} \right) & .3 = \left(\tan \left(\arcsin \left(-\frac{\sqrt{2}}{2} \right) \right) = -1 \right) \\ .4 = \left(\sin \left(\arccos \left(-\frac{\sqrt{3}}{2} \right) \right) = \frac{1}{2} \right) & .5 = \left(\arcsin \left(\sin \left(\frac{\pi}{6} \right) \right) = \frac{\pi}{6} \right) & .6 = \left(\arcsin \left(\cos \left(\frac{\pi}{4} \right) \right) = \frac{\pi}{4} \right) \\ .7 = \left(\arcsin \left(\sin \left(\frac{13\pi}{6} \right) \right) = \frac{\pi}{6} \right) & .8 = \left(\arccos \left(\cos \left(-\frac{5\pi}{6} \right) \right) = \frac{5\pi}{6} \right) & .9 = \left(\arctan \left(\tan \left(\frac{13\pi}{6} \right) \right) = \frac{\pi}{6} \right) \\ .10 = \left(\sec \left(\arcsin \left(\frac{\sqrt{2}}{2} \right) \right) = \sqrt{2} \right) & .11 = \left(\sec \left(\arcsin \left(\cos \left(\frac{11\pi}{3} \right) \right) \right) = \frac{2\sqrt{3}}{3} \right) & .12 = \left(\arccos \left(\sin \left(\arccos \left(-\frac{1}{2} \right) \right) \right) = \frac{\pi}{6} \right) \end{array} \right]$$

$$Ans3 = \left[\begin{array}{l} .1 = \left(\tan \left(\arccos \left(\frac{-5}{6} \right) \right) = -\frac{\sqrt{11}}{5} \right) \\ .4 = \left(\cot \left(\arcsin \left(\frac{\sqrt{3}}{8} \right) \right) = \frac{\sqrt{61} \sqrt{3}}{3} \right) \\ .7 = \left(\sin \left(\arctan \left(\frac{\sqrt{5}}{6} \right) \right) = \frac{\sqrt{5} \sqrt{41}}{41} \right) \end{array} \right. , \left[\begin{array}{l} .2 = \left(\cos \left(\arcsin \left(\frac{2}{7} \right) \right) = \frac{3\sqrt{5}}{7} \right) \\ .5 = \left(\csc \left(\arctan \left(\frac{7}{3} \right) \right) = \frac{\sqrt{58}}{7} \right) \\ .8 = \left(\sec \left(\arccos \left(\frac{\sqrt{3}}{5} \right) \right) = \frac{5\sqrt{3}}{3} \right) \end{array} \right. , \left[\begin{array}{l} .3 = \left(\tan \left(\arcsin \left(\frac{-1}{6} \right) \right) = -\frac{\sqrt{35}}{35} \right) \\ .6 = \left(\cos \left(\arctan \left(\frac{-5}{3} \right) \right) = \frac{3\sqrt{34}}{34} \right) \\ .9 = \left(\sin \left(\arccos \left(\frac{5}{7} \right) \right) = \frac{2\sqrt{6}}{7} \right) \end{array} \right]$$

$$\text{Ans 4} = \left[\begin{array}{ll} .1 = \left(\sin \left(\arccos \left(\frac{4}{7} \right) + \arcsin \left(\frac{5}{9} \right) \right) = \frac{2\sqrt{33}\sqrt{14}}{63} + \frac{20}{63} \right) & .2 = \left(\cos \left(\arccos \left(\frac{5}{6} \right) + \arcsin \left(\frac{-1}{2} \right) \right) = \frac{5\sqrt{3}}{12} + \frac{\sqrt{11}}{12} \right) \\ .3 = \left(\sin \left(2 \arccos \left(\frac{4}{7} \right) \right) = \frac{8\sqrt{33}}{49} \right) & .4 = \left(\cos \left(2 \arcsin \left(\frac{1}{2} \right) \right) = \frac{1}{2} \right) \\ .5 = \left(\arctan \left(\cos(10\pi) + \sin \left(\frac{19\pi}{2} \right) \right) = 0 \right) & .6 = \left(\sec \left(\arccos \left(\sin \left(-\frac{11\pi}{6} \right) \right) + \arcsin \left(\cos \left(\frac{8\pi}{3} \right) \right) \right) = \frac{2\sqrt{3}}{3} \right) \end{array} \right]$$

$$Ans5 = 2 \alpha \sqrt{1 - \alpha^2}, \quad \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$Ans6 = 2\alpha^2 - 1, \quad \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$AnsI = \begin{bmatrix} .I = \left(\arcsin(-1) = -\frac{\pi}{2}\right) & .2 = \left(\arccos\left(\frac{1}{2}\right) = \frac{\pi}{3}\right) & .3 = \left(\arctan(-1) = -\frac{\pi}{4}\right) \\ .4 = \left(\arcsin\left(-\frac{\sqrt{2}}{2}\right) = -\frac{\pi}{4}\right) & .5 = (\arccos(1) = 0) & .6 = \left(\arccos\left(-\frac{1}{2}\right) = \frac{2\pi}{3}\right) \\ .7 = (\arcsin(\sqrt{2}) = undefined) & .8 = \left(\arctan(\sqrt{3}) = \frac{\pi}{3}\right) & .9 = \left(\arcsin\left(\frac{\sqrt{3}}{2}\right) = \frac{\pi}{3}\right) \end{bmatrix},$$

$$Ans2 = \left[\begin{array}{lll} .1 = \left(\tan \left(\arctan \left(\frac{\sqrt{3}}{3} \right) \right) \right) = \frac{\sqrt{3}}{3} & .2 = \left(\tan \left(\arcsin \left(-\frac{\sqrt{3}}{2} \right) \right) \right) = -\sqrt{3} & .3 = \left(\cos \left(\arcsin \left(\frac{\sqrt{2}}{2} \right) \right) \right) = \frac{\sqrt{2}}{2} \\ .4 = \left(\sin \left(\arctan(1) \right) \right) = \frac{\sqrt{2}}{2} & .5 = \left(\arctan \left(\tan \left(-\frac{\pi}{6} \right) \right) \right) = -\frac{\pi}{6} & .6 = \left(\arccos \left(\sin \left(-\frac{\pi}{6} \right) \right) \right) = \frac{2\pi}{3} \\ .7 = \left(\arcsin \left(\sin \left(-\frac{7\pi}{6} \right) \right) \right) = \frac{\pi}{6} & .8 = \left(\arccos \left(\cos \left(\frac{7\pi}{3} \right) \right) \right) = \frac{\pi}{3} & .9 = \left(\arctan \left(\tan \left(-\frac{7\pi}{6} \right) \right) \right) = -\frac{\pi}{6} \\ .10 = \left(\csc \left(\arccos \left(-\frac{\sqrt{3}}{2} \right) \right) \right) = 2 & .11 = \left(\csc \left(\arccos \left(\sin \left(\frac{11\pi}{6} \right) \right) \right) \right) = \frac{2\sqrt{3}}{3} & .12 = \left(\arccos \left(\sin \left(\arccos \left(-\frac{\sqrt{2}}{2} \right) \right) \right) \right) = \frac{\pi}{4} \end{array} \right]$$

$$Ans3 = \left[\begin{array}{lll} .1 = \left(\sec \left(\arctan \left(\frac{5}{7} \right) \right) = \frac{\sqrt{74}}{7} \right) & .2 = \left(\tan \left(\arccos \left(\frac{-3}{8} \right) \right) = -\frac{\sqrt{55}}{3} \right) & .3 = \left(\cos \left(\arcsin \left(\frac{4}{7} \right) \right) = \frac{\sqrt{33}}{7} \right) \\ .4 = \left(\csc \left(\arccos \left(\frac{\sqrt{2}}{5} \right) \right) = \frac{5\sqrt{23}}{23} \right) & .5 = \left(\sin \left(\arctan \left(\frac{\sqrt{3}}{7} \right) \right) = \frac{\sqrt{13}\sqrt{3}}{26} \right) & .6 = \left(\cos \left(\arctan(-5) \right) = \frac{\sqrt{26}}{26} \right) \\ .7 = \left(\cot \left(\arcsin \left(\frac{\sqrt{5}}{8} \right) \right) = -\frac{\sqrt{5}\sqrt{59}}{5} \right) & .8 = \left(\sin \left(\arccos \left(\frac{3}{5} \right) \right) = \frac{4}{5} \right) & .9 = \left(\tan \left(\arcsin \left(\frac{-4}{7} \right) \right) = -\frac{4\sqrt{33}}{33} \right) \end{array} \right], \quad \left[\begin{array}{l} M \\ a \\ t \\ h \\ @ \\ M \\ U \end{array} \right]$$

$$Ans4 = \left[\begin{array}{ll} .1 = \left(\sin \left(\arccos \left(\frac{4}{5} \right) + \arcsin \left(\frac{5}{8} \right) \right) = \frac{3\sqrt{39}}{40} + \frac{1}{2} & .2 = \left(\cos \left(\arccos \left(\frac{4}{7} \right) + \arcsin \left(\frac{-1}{5} \right) \right) = \frac{8\sqrt{6}}{35} + \frac{\sqrt{33}}{35} \right) \\ .3 = \left(\sin \left(2 \arcsin \left(\frac{1}{6} \right) \right) = \frac{\sqrt{35}}{18} \right) & .4 = \left(\cos \left(2 \arccos \left(\frac{1}{5} \right) \right) = \frac{-23}{25} \right) \\ .5 = \left(\arctan \left(\cos \left(\frac{5\pi}{2} \right) + \sin \left(\frac{7\pi}{2} \right) \right) = -\frac{\pi}{4} \right) & .6 = \left(\sec \left(\arccos \left(\sin \left(\frac{7\pi}{6} \right) \right) + \arcsin \left(\cos \left(\frac{11\pi}{3} \right) \right) \right) = -\frac{2\sqrt{3}}{3} \right) \end{array} \right]$$

$$Ans5 = 2 \alpha \sqrt{1 - \alpha^2}, \quad \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$Ans6 = 1 - 2 \alpha^2, \quad , \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$\text{Ans } I = \begin{bmatrix} .1 = \left(\arctan(\sqrt{3}) = \frac{\pi}{3} \right) & .2 = \left(\arcsin\left(\frac{\sqrt{2}}{2}\right) = \frac{\pi}{4} \right) & .3 = (\arccos(1) = 0) \\ .4 = (\arcsin(-3) = \text{undefined}) & .5 = (\arctan(0) = 0) & .6 = \left(\arcsin(-1) = -\frac{\pi}{2} \right) \\ .7 = \left(\arcsin\left(-\frac{\sqrt{3}}{2}\right) = -\frac{\pi}{3} \right) & .8 = \left(\arccos\left(\frac{1}{2}\right) = \frac{\pi}{3} \right) & .9 = \left(\arccos\left(\frac{-1}{2}\right) = \frac{2\pi}{3} \right) \end{bmatrix}, \begin{bmatrix} M \\ a \\ i \\ h \\ @ \\ M \\ U \\ T \end{bmatrix}$$

$$\text{Ans2} = \left[\begin{array}{lll} .1 = \left(\sin \left(\arcsin \left(\frac{\sqrt{2}}{2} \right) \right) = \frac{\sqrt{2}}{2} \right) & .2 = \left(\cos \left(\arctan(1) \right) = \frac{\sqrt{2}}{2} \right) & .3 = \left(\tan \left(\arcsin \left(\frac{-1}{2} \right) \right) = -\frac{\sqrt{3}}{3} \right) \\ .4 = \left(\sin \left(\arccos \left(\frac{\sqrt{2}}{2} \right) \right) = \frac{\sqrt{2}}{2} \right) & .5 = \left(\arctan \left(\tan \left(\frac{\pi}{3} \right) \right) = \frac{\pi}{3} \right) & .6 = \left(\arcsin \left(\cos \left(\frac{\pi}{3} \right) \right) = \frac{\pi}{6} \right) \\ .7 = \left(\arcsin \left(\sin \left(-\frac{5\pi}{6} \right) \right) = -\frac{\pi}{6} \right) & .8 = \left(\arccos \left(\cos \left(-\frac{2\pi}{3} \right) \right) = \frac{2\pi}{3} \right) & .9 = \left(\arctan \left(\tan \left(\frac{13\pi}{6} \right) \right) = \frac{\pi}{6} \right) \\ .10 = \left(\sec \left(\arccos \left(-\frac{\sqrt{3}}{2} \right) \right) = -\frac{2\sqrt{3}}{3} \right) & .11 = \left(\cot \left(\arcsin \left(\cos \left(\frac{11\pi}{3} \right) \right) \right) = \sqrt{3} \right) & .12 = \left(\arccos \left(\sin \left(\arccos \left(\frac{\sqrt{3}}{2} \right) \right) \right) = \frac{\pi}{3} \right) \end{array} \right]$$

$$Ans3 = \left[\begin{array}{lll} 1. = \left(\sin \left(\arccos \left(\frac{-4}{9} \right) \right) = \frac{\sqrt{65}}{9} \right) & 2. = \left(\cos \left(\arcsin \left(\frac{2}{5} \right) \right) = \frac{\sqrt{21}}{5} \right) & 3. = \left(\sec \left(\arccos \left(\frac{3}{7} \right) \right) = \frac{7}{3} \right) \\ 4. = \left(\cos \left(\arctan \left(\sqrt{3} \right) \right) = \frac{1}{2} \right) & 5. = \left(\sin \left(\arctan (-6) \right) = -\frac{6\sqrt{37}}{37} \right) & 6. = \left(\csc \left(\arcsin \left(-\frac{\sqrt{3}}{7} \right) \right) = -\frac{7\sqrt{3}}{3} \right) \\ 7. = \left(\cot \left(\arctan \left(\frac{1}{7} \right) \right) = 7 \right) & 8. = \left(\tan \left(\arccos \left(\frac{\sqrt{3}}{8} \right) \right) = \frac{\sqrt{61}\sqrt{3}}{3} \right) & 9. = \left(\tan \left(\arcsin \left(\frac{-5}{9} \right) \right) = -\frac{5\sqrt{14}}{28} \right) \end{array} \right]$$

$$Ans4 = \left[\begin{array}{ll} .1 = \left(\sin \left(\arccos \left(\frac{5}{6} \right) + \arcsin \left(\frac{5}{6} \right) \right) = 1 & .2 = \left(\cos \left(\arccos \left(\frac{3}{4} \right) + \arcsin \left(\frac{-1}{5} \right) \right) = \frac{3\sqrt{6}}{10} + \frac{\sqrt{7}}{20} \right) \\ .3 = \left(\sin \left(2 \arccos \left(\frac{5}{7} \right) \right) = \frac{20\sqrt{6}}{49} & .4 = \left(\cos \left(2 \arccos \left(\frac{1}{6} \right) \right) = \frac{-17}{18} \right) \\ .5 = \left(\arctan \left(\cos(5\pi) + \sin(3\pi) \right) = -\frac{\pi}{4} \right) & .6 = \left(\cot \left(\arccos \left(\sin \left(\frac{5\pi}{6} \right) \right) + \arcsin \left(\cos \left(\frac{10\pi}{3} \right) \right) \right) = \sqrt{3} \right) \end{array} \right] \left[\begin{array}{l} M \\ a \\ t \\ h \\ @ \\ M \\ U \\ T \end{array} \right]$$

$$Ans5 = 2 \alpha \sqrt{1 - \alpha^2}, \quad \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$Ans6 = 2\alpha^2 - 1, \quad \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$Ans1 = \begin{bmatrix} .1 = \left(\arcsin(-1) = -\frac{\pi}{2}\right) & .2 = (\arcsin(-7) = \text{undefined}) & .3 = \left(\arccos\left(\frac{1}{2}\right) = \frac{\pi}{3}\right) \\ .4 = \left(\arctan(1) = \frac{\pi}{4}\right) & .5 = \left(\arccos\left(\frac{-1}{2}\right) = \frac{2\pi}{3}\right) & .6 = \left(\arcsin\left(\frac{\sqrt{3}}{2}\right) = \frac{\pi}{3}\right) \\ .7 = \left(\arcsin\left(-\frac{\sqrt{3}}{2}\right) = -\frac{\pi}{3}\right) & .8 = (\arccos(1) = 0) & .9 = \left(\arctan\left(-\frac{\sqrt{3}}{3}\right) = -\frac{\pi}{6}\right) \end{bmatrix}, \begin{bmatrix} M \\ a \\ t \\ h \\ @ \\ U \end{bmatrix}$$

$$\text{Ans2} = \left[\begin{array}{lll} .1 = \left(\sin \left(\arcsin \left(\frac{\sqrt{3}}{2} \right) \right) \right) = \frac{\sqrt{3}}{2} & .2 = \left(\cos \left(\arctan(-\sqrt{3}) \right) \right) = \frac{1}{2} & .3 = \left(\tan \left(\arcsin \left(\frac{\sqrt{2}}{2} \right) \right) \right) = 1 \\ .4 = \left(\sin \left(\arctan \left(-\frac{\sqrt{3}}{3} \right) \right) \right) = \frac{-1}{2} & .5 = \left(\arccos \left(\cos \left(\frac{\pi}{4} \right) \right) \right) = \frac{\pi}{4} & .6 = \left(\arcsin \left(\cos \left(\frac{5\pi}{6} \right) \right) \right) = -\frac{\pi}{3} \\ .7 = \left(\arcsin \left(\sin \left(-\frac{5\pi}{6} \right) \right) \right) = -\frac{\pi}{6} & .8 = \left(\arccos \left(\cos \left(\frac{10\pi}{3} \right) \right) \right) = \frac{2\pi}{3} & .9 = \left(\arctan \left(\tan \left(-\frac{13\pi}{6} \right) \right) \right) = -\frac{\pi}{6} \\ .10 = \left(\csc \left(\arcsin \left(-\frac{\sqrt{3}}{2} \right) \right) \right) = -\frac{2\sqrt{3}}{3} & .11 = \left(\sec \left(\arcsin \left(\cos \left(\frac{8\pi}{3} \right) \right) \right) \right) = \frac{2\sqrt{3}}{3} & .12 = \left(\arcsin \left(\cos \left(\arcsin \left(\frac{-1}{2} \right) \right) \right) \right) = \frac{\pi}{3} \end{array} \right]$$

$$Ans3 = \left[\begin{array}{lll} .1 = \left(\cot \left(\arcsin \left(\frac{5}{7} \right) \right) = \frac{2\sqrt{6}}{5} \right) & .2 = \left(\tan \left(\arccos \left(\frac{-4}{9} \right) \right) = -\frac{\sqrt{65}}{4} \right) & .3 = \left(\sin \left(\arctan \left(\frac{4}{3} \right) \right) = \frac{4}{5} \right) \\ .4 = \left(\sin \left(\arccos \left(\frac{\sqrt{7}}{12} \right) \right) = \frac{\sqrt{137}}{12} \right) & .5 = \left(\csc \left(\arctan \left(\frac{-1}{7} \right) \right) = -5\sqrt{2} \right) & .6 = \left(\cos \left(\arcsin \left(\frac{-3}{7} \right) \right) = \frac{2\sqrt{10}}{7} \right) \\ .7 = \left(\tan \left(\arcsin \left(-\frac{\sqrt{5}}{8} \right) \right) = -\frac{\sqrt{5}\sqrt{59}}{59} \right) & .8 = \left(\cos \left(\arctan \left(\frac{7}{3} \right) \right) = \frac{3\sqrt{14}}{14} \right) & .9 = \left(\sec \left(\arccos \left(\frac{2}{7} \right) \right) = \frac{7}{2} \right) \end{array} \right]$$

$$Ans4 = \left[\begin{array}{ll} .1 = \left(\sin \left(\arccos \left(\frac{3}{8} \right) + \arcsin \left(\frac{-3}{7} \right) \right) = \frac{\sqrt{55} \sqrt{10}}{28} - \frac{9}{56} \right) & .2 = \left(\cos \left(\arccos \left(\frac{2}{3} \right) + \arcsin \left(\frac{1}{5} \right) \right) = \frac{4\sqrt{6}}{15} - \frac{\sqrt{5}}{15} \right) \\ .3 = \left(\sin \left(2 \arccos \left(\frac{3}{4} \right) \right) = \frac{3\sqrt{7}}{8} \right) & .4 = \left(\cos \left(2 \arcsin \left(\frac{1}{2} \right) \right) = \frac{1}{2} \right) \\ .5 = \left(\arctan \left(\cos(3\pi) + \sin(-2\pi) \right) = -\frac{\pi}{4} \right) & .6 = \left(\sec \left(\arccos \left(\sin \left(\frac{7\pi}{6} \right) \right) + \arcsin \left(\cos \left(\frac{7\pi}{3} \right) \right) \right) = -\frac{2\sqrt{3}}{3} \right) \end{array} \right]$$

$$Ans5 = 2 \alpha \sqrt{1 - \alpha^2}, \quad \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$Ans6 = 1 - 2 \alpha^2, \quad , \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$Ans I = \left[\begin{array}{lll} .1 = (\arcsin(-\sqrt{2}) = undefined) & .2 = (\arctan(0) = 0) & .3 = \left(\arccos\left(-\frac{\sqrt{3}}{2}\right) = \frac{5\pi}{6} \right) \\ .4 = \left(\arctan(-\sqrt{3}) = -\frac{\pi}{3} \right) & .5 = \left(\arcsin\left(\frac{-1}{2}\right) = -\frac{\pi}{6} \right) & .6 = \left(\arccos\left(\frac{\sqrt{3}}{2}\right) = \frac{\pi}{6} \right) \\ .7 = \left(\arcsin\left(\frac{1}{2}\right) = \frac{\pi}{6} \right) & .8 = (\arccos(1) = 0) & .9 = \left(\arcsin(-1) = -\frac{\pi}{2} \right) \end{array} \right], \left[\begin{array}{c} M \\ a \\ t \\ h \\ @ \\ M \\ U \\ T \end{array} \right]$$

$$\text{Ans2} = \left[\begin{array}{lll} .1 = (\tan(\arctan(\sqrt{3}))) = \sqrt{3} & .2 = \left(\cos\left(\arctan\left(\frac{\sqrt{3}}{3}\right)\right) = \frac{\sqrt{3}}{2} \right) & .3 = \left(\sin\left(\arctan\left(-\frac{\sqrt{3}}{3}\right)\right) = -\frac{1}{2} \right) \\ .4 = \left(\tan\left(\arcsin\left(-\frac{\sqrt{3}}{2}\right)\right) = -\sqrt{3} \right) & .5 = \left(\arccos\left(\cos\left(\frac{5\pi}{6}\right)\right) = \frac{5\pi}{6} \right) & .6 = \left(\arcsin\left(\cos\left(\frac{2\pi}{3}\right)\right) = -\frac{\pi}{6} \right) \\ .7 = \left(\arcsin\left(\sin\left(\frac{13\pi}{6}\right)\right) = \frac{\pi}{6} \right) & .8 = \left(\arccos\left(\cos\left(-\frac{5\pi}{6}\right)\right) = \frac{5\pi}{6} \right) & .9 = \left(\arctan\left(\tan\left(\frac{17\pi}{6}\right)\right) = -\frac{\pi}{6} \right) \\ .10 = \left(\cot\left(\arccos\left(\frac{1}{2}\right)\right) = -\frac{\sqrt{3}}{3} \right) & .11 = \left(\sec\left(\arccos\left(\sin\left(-\frac{17\pi}{6}\right)\right)\right) = -2 \right) & .12 = \left(\arcsin\left(\cos\left(\arcsin\left(\frac{1}{2}\right)\right)\right) = \frac{\pi}{3} \right) \end{array} \right]$$

$$Ans3 = \left[\begin{array}{lll} .1 = \left(\sin \left(\arccos \left(\frac{-5}{8} \right) \right) = \frac{\sqrt{39}}{8} \right) & .2 = \left(\sin \left(\arctan(\sqrt{7}) \right) = \frac{\sqrt{7} \sqrt{2}}{4} \right) & .3 = \left(\cot \left(\arcsin \left(-\frac{\sqrt{2}}{3} \right) \right) = -\frac{\sqrt{7} \sqrt{2}}{2} \right) \\ .4 = \left(\sec \left(\arccos \left(\frac{1}{3} \right) \right) = 3 \right) & .5 = \left(\tan \left(\arccos \left(-\frac{\sqrt{5}}{9} \right) \right) = -\frac{2 \sqrt{19} \sqrt{5}}{5} \right) & .6 = \left(\csc \left(\arctan \left(\frac{1}{2} \right) \right) = \sqrt{5} \right) \\ .7 = \left(\cos \left(\arctan \left(\frac{-1}{4} \right) \right) = \frac{4 \sqrt{17}}{17} \right) & .8 = \left(\cos \left(\arcsin \left(\frac{-3}{8} \right) \right) = \frac{\sqrt{55}}{8} \right) & .9 = \left(\tan \left(\arcsin \left(\frac{3}{4} \right) \right) = \frac{3 \sqrt{7}}{7} \right) \end{array} \right]$$

$$Ans4 = \left[\begin{array}{ll} .1 = \left(\sin \left(\arccos \left(\frac{5}{8} \right) + \arcsin \left(\frac{-3}{8} \right) \right) = \frac{\sqrt{39} \sqrt{55}}{64} - \frac{15}{64} \right) & .2 = \left(\cos \left(\arccos \left(\frac{1}{2} \right) + \arcsin \left(\frac{4}{5} \right) \right) = \frac{3}{10} - \frac{2\sqrt{3}}{5} \right) \\ .3 = \left(\sin \left(2 \arcsin \left(\frac{1}{3} \right) \right) = \frac{4\sqrt{2}}{9} \right) & .4 = \left(\cos \left(2 \arccos \left(\frac{1}{2} \right) \right) = \frac{-1}{2} \right) \\ .5 = \left(\arctan \left(\cos (2\pi) + \sin \left(\frac{7\pi}{2} \right) \right) = 0 \right) & .6 = \left(\cot \left(\arccos \left(\sin \left(-\frac{13\pi}{6} \right) \right) + \arcsin \left(\cos \left(\frac{13\pi}{3} \right) \right) \right) = -\sqrt{3} \right) \end{array} \right]$$

$$Ans5 = 2 \alpha \sqrt{1 - \alpha^2}, \quad \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$Ans6 = 1 - 2 \alpha^2, \quad \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$Ans1 = \begin{bmatrix} .1 = \left(\arctan(1) = \frac{\pi}{4} \right) & .2 = \left(\arcsin\left(\frac{1}{2}\right) = -\frac{\pi}{6} \right) & .3 = \left(\arccos\left(\frac{\sqrt{2}}{2}\right) = \frac{\pi}{4} \right) \\ .4 = (\arcsin(7) = \text{undefined}) & .5 = \left(\arctan(-\sqrt{3}) = -\frac{\pi}{3} \right) & .6 = \left(\arccos(0) = \frac{\pi}{2} \right) \\ .7 = \left(\arcsin(-1) = -\frac{\pi}{2} \right) & .8 = \left(\arcsin\left(\frac{1}{2}\right) = \frac{\pi}{6} \right) & .9 = \left(\arccos\left(-\frac{\sqrt{3}}{2}\right) = \frac{5\pi}{6} \right) \end{bmatrix},$$

$$\text{Ans 2} = \left[\begin{array}{lll} .1 = \left(\sin \left(\arcsin \left(\frac{\sqrt{2}}{2} \right) \right) = \frac{\sqrt{2}}{2} \right) & .2 = \left(\cos \left(\arctan(1) \right) = \frac{\sqrt{2}}{2} \right) & .3 = \left(\tan \left(\arcsin \left(-\frac{\sqrt{3}}{2} \right) \right) = -\sqrt{3} \right) \\ .4 = \left(\sin \left(\arccos \left(\frac{-1}{2} \right) \right) = \frac{\sqrt{3}}{2} \right) & .5 = \left(\arctan \left(\tan \left(\frac{\pi}{6} \right) \right) = \frac{\pi}{6} \right) & .6 = \left(\arcsin \left(\cos \left(\frac{5\pi}{6} \right) \right) = -\frac{\pi}{3} \right) \\ .7 = \left(\arcsin \left(\sin \left(-\frac{11\pi}{6} \right) \right) = \frac{\pi}{6} \right) & .8 = \left(\arccos \left(\cos \left(-\frac{\pi}{6} \right) \right) = \frac{\pi}{6} \right) & .9 = \left(\arctan \left(\tan \left(\frac{13\pi}{6} \right) \right) = \frac{\pi}{6} \right) \\ .10 = \left(\cot \left(\arctan(\sqrt{3}) \right) = \frac{\sqrt{3}}{3} \right) & .11 = \left(\cot \left(\arcsin \left(\cos \left(-\frac{5\pi}{6} \right) \right) \right) = -\frac{\sqrt{3}}{3} \right) & .12 = \left(\arccos \left(\sin \left(\arccos \left(\frac{1}{2} \right) \right) \right) = \frac{\pi}{6} \right) \end{array} \right]$$

$$Ans3 = \begin{bmatrix} .1 = \left(\csc \left(\arccos \left(\frac{-1}{4} \right) \right) = \frac{4\sqrt{15}}{15} \right) & .2 = \left(\cot \left(\arcsin \left(\frac{\sqrt{3}}{5} \right) \right) = \frac{\sqrt{3}\sqrt{22}}{3} \right) & .3 = \left(\tan \left(\arccos \left(\frac{2}{3} \right) \right) = \frac{\sqrt{5}}{2} \right) \\ .4 = \left(\sin \left(\arccos \left(\frac{\sqrt{2}}{3} \right) \right) = \frac{\sqrt{7}}{3} \right) & .5 = \left(\tan \left(\arcsin \left(\frac{5}{8} \right) \right) = \frac{5\sqrt{39}}{39} \right) & .6 = \left(\cos \left(\arcsin \left(\frac{-1}{4} \right) \right) = \frac{\sqrt{15}}{4} \right) \\ .7 = \left(\sec \left(\arctan \left(\frac{3}{5} \right) \right) = \frac{\sqrt{34}}{5} \right) & .8 = \left(\cos \left(\arctan \left(\frac{-1}{3} \right) \right) = \frac{3\sqrt{10}}{10} \right) & .9 = \left(\sin \left(\arctan \left(\frac{\sqrt{7}}{4} \right) \right) = \frac{\sqrt{7}\sqrt{23}}{23} \right) \end{bmatrix}$$

$$Ans4 = \left[\begin{array}{ll} .1 = \left(\sin \left(\arccos \left(\frac{4}{7} \right) + \arcsin \left(\frac{2}{7} \right) \right) = \frac{3\sqrt{33}\sqrt{5}}{49} + \frac{8}{49} \right. & .2 = \left(\cos \left(\arccos \left(\frac{5}{8} \right) + \arcsin \left(\frac{-1}{2} \right) \right) = \frac{5\sqrt{3}}{16} + \frac{\sqrt{39}}{16} \right) \\ .3 = \left(\sin \left(2 \arccos \left(\frac{4}{9} \right) \right) = \frac{8\sqrt{65}}{81} \right. & .4 = \left(\cos \left(2 \arccos \left(\frac{1}{2} \right) \right) = \frac{-1}{2} \right) \\ .5 = \left(\arctan \left(\cos(4\pi) + \sin(-4\pi) \right) \right) = \frac{\pi}{4} & .6 = \left(\csc \left(\arccos \left(\sin \left(\frac{11\pi}{6} \right) \right) + \arcsin \left(\cos \left(\frac{13\pi}{3} \right) \right) \right) = 2 \right) \end{array} \right]$$

$$Ans5 = 2 \alpha \sqrt{1 - \alpha^2}, \quad \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$Ans6 = 2\alpha^2 - 1, \quad , \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$Ans1 = \left[\begin{array}{lll} .1 = (\arccos(-\sqrt{2}) = \text{undefined}) & .2 = \left(\arccos\left(\frac{\sqrt{2}}{2}\right) = \frac{\pi}{4} \right) & .3 = \left(\arccos\left(-\frac{\sqrt{3}}{2}\right) = \frac{5\pi}{6} \right) \\ .4 = (\arctan(0) = 0) & .5 = \left(\arctan\left(\frac{\sqrt{3}}{3}\right) = \frac{\pi}{6} \right) & .6 = (\arcsin(0) = 0) \\ .7 = (\arccos(-1) = \pi) & .8 = \left(\arcsin\left(-\frac{\sqrt{2}}{2}\right) = -\frac{\pi}{4} \right) & .9 = \left(\arcsin\left(\frac{1}{2}\right) = \frac{\pi}{6} \right) \end{array} \right],$$

$$\text{Ans2} = \left[\begin{array}{lll} 1.1 = \left(\cos \left(\arccos \left(-\frac{\sqrt{3}}{2} \right) \right) = -\frac{\sqrt{3}}{2} \right) & 1.2 = \left(\cos \left(\arctan(\sqrt{3}) \right) = \frac{1}{2} \right) & 1.3 = \left(\sin \left(\arccos \left(\frac{-1}{2} \right) \right) = \frac{\sqrt{3}}{2} \right) \\ 1.4 = \left(\tan \left(\arcsin \left(\frac{\sqrt{3}}{2} \right) \right) = \sqrt{3} \right) & 1.5 = \left(\arcsin \left(\sin \left(-\frac{\pi}{3} \right) \right) = -\frac{\pi}{3} \right) & 1.6 = \left(\arccos \left(\sin \left(\frac{\pi}{6} \right) \right) = \frac{\pi}{3} \right) \\ 1.7 = \left(\arcsin \left(\sin \left(\frac{13\pi}{6} \right) \right) = \frac{\pi}{6} \right) & 1.8 = \left(\arccos \left(\cos \left(\frac{\pi}{6} \right) \right) = \frac{\pi}{6} \right) & 1.9 = \left(\arctan \left(\tan \left(-\frac{13\pi}{6} \right) \right) = -\frac{\pi}{6} \right) \\ 1.10 = \left(\cot \left(\arctan \left(\frac{\sqrt{3}}{3} \right) \right) = \sqrt{3} \right) & 1.11 = \left(\tan \left(\arccos \left(\sin \left(-\frac{11\pi}{6} \right) \right) \right) = \sqrt{3} \right) & 1.12 = \left(\arccos \left(\sin \left(\arccos \left(-\frac{\sqrt{2}}{2} \right) \right) \right) = \frac{\pi}{4} \right) \end{array} \right]$$

$$Ans3 = \left[\begin{array}{lll} 1. = \left(\sin \left(\arctan \left(-\frac{\sqrt{7}}{5} \right) \right) = -\frac{\sqrt{7} \sqrt{2}}{8} \right) & 2. = \left(\cos \left(\arcsin \left(\frac{\sqrt{6}}{7} \right) \right) = \frac{\sqrt{43}}{7} \right) & 3. = \left(\sec \left(\arccos \left(\frac{4}{5} \right) \right) = \frac{5}{4} \right) \\ 4. = \left(\cos \left(\arctan (-2) \right) = \frac{\sqrt{5}}{5} \right) & 5. = \left(\csc \left(\arctan (2) \right) = \frac{\sqrt{5}}{2} \right) & 6. = \left(\tan \left(\arcsin \left(-\frac{2}{3} \right) \right) = -\frac{2\sqrt{5}}{5} \right) \\ 7. = \left(\cot \left(\arcsin \left(\frac{2}{5} \right) \right) = \frac{\sqrt{21}}{2} \right) & 8. = \left(\tan \left(\arccos \left(-\frac{1}{4} \right) \right) = -\sqrt{15} \right) & 9. = \left(\sin \left(\arccos \left(-\frac{\sqrt{7}}{10} \right) \right) = \frac{\sqrt{93}}{10} \right) \end{array} \right],$$

$$Ans4 = \left[\begin{array}{ll} .1 = \left(\sin \left(\arccos \left(\frac{5}{7} \right) + \arcsin \left(\frac{-1}{3} \right) \right) = \frac{4\sqrt{6}\sqrt{2}}{21} - \frac{5}{21} \right) & .2 = \left(\cos \left(\arccos \left(\frac{1}{4} \right) + \arcsin \left(\frac{2}{3} \right) \right) = \frac{\sqrt{5}}{12} - \frac{\sqrt{15}}{6} \right) \\ .3 = \left(\sin \left(2 \arcsin \left(\frac{3}{4} \right) \right) = \frac{3\sqrt{7}}{8} \right) & .4 = \left(\cos \left(2 \arcsin \left(\frac{3}{8} \right) \right) = \frac{23}{32} \right) \\ .5 = \left(\arctan \left(\cos \left(\frac{3\pi}{2} \right) + \sin \left(\frac{9\pi}{2} \right) \right) = \frac{\pi}{4} \right) & .6 = \left(\csc \left(\arccos \left(\sin \left(\frac{17\pi}{6} \right) \right) + \arcsin \left(\cos \left(\frac{8\pi}{3} \right) \right) \right) = 2 \right) \end{array} \right]$$

$$Ans5 = 2 \alpha \sqrt{1 - \alpha^2}, \quad \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$Ans6 = 1 - 2 \alpha^2, \quad \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$Ans1 = \begin{bmatrix} .1 = \left(\arctan(\sqrt{3}) = \frac{\pi}{3} \right) & .2 = \left(\arcsin\left(-\frac{\sqrt{2}}{2}\right) = -\frac{\pi}{4} \right) & .3 = \left(\arcsin\left(\frac{1}{2}\right) = \frac{\pi}{6} \right) \\ .4 = \left(\arccos\left(\frac{\sqrt{3}}{2}\right) = \frac{\pi}{6} \right) & .5 = \left(\arccos(0) = \frac{\pi}{2} \right) & .6 = (\arcsin(-\sqrt{3}) = \text{undefined}) \\ .7 = (\arcsin(-1) = -\frac{\pi}{2}) & .8 = \left(\arctan\left(-\frac{\sqrt{3}}{3}\right) = -\frac{\pi}{6} \right) & .9 = \left(\arccos\left(\frac{-1}{2}\right) = \frac{2\pi}{3} \right) \end{bmatrix}, \begin{bmatrix} M \\ a \\ t \\ h \\ @ \\ M \\ U \\ T \end{bmatrix}$$

$$\text{Ans2} = \left[\begin{array}{lll} .1 = \left(\cos \left(\arccos \left(\frac{\sqrt{2}}{2} \right) \right) = \frac{\sqrt{2}}{2} \right) & .2 = \left(\tan \left(\arcsin \left(\frac{\sqrt{3}}{2} \right) \right) = \sqrt{3} \right) & .3 = \left(\sin \left(\arccos \left(-\frac{\sqrt{2}}{2} \right) \right) = \frac{\sqrt{2}}{2} \right) \\ .4 = \left(\cos \left(\arctan \left(-\sqrt{3} \right) \right) = \frac{1}{2} \right) & .5 = \left(\arccos \left(\cos \left(\frac{\pi}{3} \right) \right) = \frac{\pi}{3} \right) & .6 = \left(\arccos \left(\sin \left(\frac{\pi}{3} \right) \right) = \frac{\pi}{6} \right) \\ .7 = \left(\arcsin \left(\sin \left(-\frac{17\pi}{6} \right) \right) = -\frac{\pi}{6} \right) & .8 = \left(\arccos \left(\cos \left(-\frac{3\pi}{4} \right) \right) = \frac{3\pi}{4} \right) & .9 = \left(\arctan \left(\tan \left(\frac{7\pi}{6} \right) \right) = \frac{\pi}{6} \right) \\ .10 = \left(\cot \left(\arcsin \left(\frac{\sqrt{2}}{2} \right) \right) = 1 \right) & .11 = \left(\sec \left(\arccos \left(\sin \left(\frac{13\pi}{6} \right) \right) \right) = 2 \right) & .12 = \left(\arccos \left(\sin \left(\arccos \left(\frac{\sqrt{3}}{2} \right) \right) \right) = \frac{\pi}{3} \right) \end{array} \right]$$

$$Ans3 = \left[\begin{array}{lll} .1 = \left(\sec \left(\arctan \left(\frac{-6}{7} \right) \right) = \frac{\sqrt{85}}{7} \right) & .2 = \left(\sin \left(\arctan \left(\frac{2}{3} \right) \right) = \frac{2\sqrt{13}}{13} \right) & .3 = \left(\tan \left(\arccos \left(\frac{\sqrt{7}}{11} \right) \right) = \frac{\sqrt{114}\sqrt{7}}{7} \right) \\ .4 = \left(\cos \left(\arctan \left(\frac{\sqrt{7}}{6} \right) \right) = \frac{6\sqrt{43}}{43} \right) & .5 = \left(\sin \left(\arccos \left(\frac{1}{6} \right) \right) = \frac{\sqrt{35}}{6} \right) & .6 = \left(\cot \left(\arccos \left(\frac{-3}{5} \right) \right) = \frac{-3}{4} \right) \\ .7 = \left(\cos \left(\arcsin \left(\frac{\sqrt{3}}{7} \right) \right) = \frac{\sqrt{46}}{7} \right) & .8 = \left(\tan \left(\arcsin \left(\frac{4}{7} \right) \right) = \frac{4\sqrt{33}}{33} \right) & .9 = \left(\csc \left(\arcsin \left(\frac{-2}{5} \right) \right) = \frac{-5}{2} \right) \end{array} \right]$$

$$Ans4 = \left[\begin{array}{ll} .1 = \left(\sin \left(\arccos \left(\frac{2}{7} \right) + \arcsin \left(\frac{3}{5} \right) \right) = \frac{12\sqrt{5}}{35} + \frac{6}{35} \right) & .2 = \left(\cos \left(\arccos \left(\frac{2}{3} \right) + \arcsin \left(\frac{-1}{6} \right) \right) = \frac{\sqrt{35}}{9} + \frac{\sqrt{5}}{18} \right) \\ .3 = \left(\sin \left(2 \arcsin \left(\frac{1}{2} \right) \right) = \frac{\sqrt{3}}{2} \right) & .4 = \left(\cos \left(2 \arccos \left(\frac{5}{8} \right) \right) = \frac{-7}{32} \right) \\ .5 = \left(\arctan \left(\cos \left(\frac{5\pi}{2} \right) + \sin \left(-\frac{5\pi}{2} \right) \right) = -\frac{\pi}{4} \right) & .6 = \left(\csc \left(\arccos \left(\sin \left(\frac{5\pi}{6} \right) \right) + \arcsin \left(\cos \left(\frac{4\pi}{3} \right) \right) \right) = 2 \right) \end{array} \right]$$

$$Ans5 = 2 \alpha \sqrt{1 - \alpha^2}, \quad \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$Ans6 = 1 - 2 \alpha^2, \quad , \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$Ans1 = \left[\begin{array}{ccc} .1 = \left(\arcsin\left(\frac{\sqrt{3}}{2}\right) = \frac{\pi}{3} \right) & .2 = \left(\arccos\left(\frac{1}{2}\right) = \frac{\pi}{3} \right) & .3 = \left(\arctan(\sqrt{3}) = \frac{\pi}{3} \right) \\ .4 = \left(\arccos\left(-\frac{\sqrt{3}}{2}\right) = \frac{5\pi}{6} \right) & .5 = \left(\arccos(0) = \frac{\pi}{2} \right) & .6 = \left(\arcsin(-1) = -\frac{\pi}{2} \right) \\ .7 = \left(\arctan\left(-\frac{\sqrt{3}}{3}\right) = -\frac{\pi}{6} \right) & .8 = \left(\arcsin\left(-\frac{\sqrt{2}}{2}\right) = -\frac{\pi}{4} \right) & .9 = (\arcsin(-3) = \text{undefined}) \end{array} \right], \left[\begin{array}{c} M \\ a \\ t \\ h \\ @ \\ M \\ U \\ T \end{array} \right]$$

$$\text{Ans2} = \left[\begin{array}{lll} .1 = (\tan(\arctan(1))) = 1 & .2 = \left(\sin(\arcsin(\arctan(-\sqrt{3}))) = -\frac{\sqrt{3}}{2} \right) & .3 = \left(\tan\left(\arcsin\left(\frac{\sqrt{2}}{2}\right)\right) = 1 \right) \\ .4 = \left(\cos(\arctan(\sqrt{3})) = \frac{1}{2} \right) & .5 = \left(\arcsin\left(\sin\left(-\frac{\pi}{4}\right)\right) = -\frac{\pi}{4} \right) & .6 = \left(\arccos\left(\sin\left(\frac{\pi}{6}\right)\right) = \frac{\pi}{3} \right) \\ .7 = \left(\arcsin\left(\sin\left(\frac{11\pi}{6}\right)\right) = -\frac{\pi}{6} \right) & .8 = \left(\arccos\left(\cos\left(\frac{13\pi}{3}\right)\right) = \frac{\pi}{3} \right) & .9 = \left(\arctan\left(\tan\left(-\frac{7\pi}{6}\right)\right) = -\frac{\pi}{6} \right) \\ .10 = \left(\csc(\arctan\left(-\frac{\sqrt{3}}{3}\right)) = -2 \right) & .11 = \left(\csc(\arccos(\sin(-\frac{13\pi}{6}))) = \frac{2\sqrt{3}}{3} \right) & .12 = \left(\arccos(\sin(\arccos(\frac{\sqrt{3}}{2}))) = \frac{\pi}{3} \right) \end{array} \right]$$

$$Ans3 = \left[\begin{array}{lll} .1 = \left(\csc \left(\arccos \left(\frac{\sqrt{7}}{9} \right) \right) = \frac{9\sqrt{74}}{74} \right) & .2 = \left(\cot \left(\arctan \left(\sqrt{3} \right) \right) = \frac{\sqrt{3}}{3} \right) & .3 = \left(\tan \left(\arccos \left(\frac{3}{8} \right) \right) = \frac{\sqrt{55}}{3} \right) \\ .4 = \left(\sin \left(\arctan \left(6 \right) \right) = \frac{6\sqrt{37}}{37} \right) & .5 = \left(\tan \left(\arcsin \left(\frac{3}{8} \right) \right) = \frac{3\sqrt{55}}{55} \right) & .6 = \left(\cos \left(\arctan \left(-2 \right) \right) = \frac{\sqrt{5}}{5} \right) \\ .7 = \left(\cos \left(\arcsin \left(-\frac{\sqrt{3}}{7} \right) \right) = \frac{\sqrt{46}}{7} \right) & .8 = \left(\sec \left(\arcsin \left(\frac{-4}{5} \right) \right) = \frac{5}{3} \right) & .9 = \left(\sin \left(\arccos \left(\frac{-3}{8} \right) \right) = \frac{\sqrt{55}}{8} \right) \end{array} \right],$$

$$Ans4 = \left[\begin{array}{ll} .1 = \left(\sin \left(\arccos \left(\frac{3}{7} \right) + \arcsin \left(\frac{-5}{7} \right) \right) = \frac{4\sqrt{10}\sqrt{6}}{49} - \frac{15}{49} \right) & .2 = \left(\cos \left(\arccos \left(\frac{4}{5} \right) + \arcsin \left(\frac{1}{6} \right) \right) = \frac{2\sqrt{35}}{15} - \frac{1}{10} \right) \\ .3 = \left(\sin \left(2 \arcsin \left(\frac{1}{3} \right) \right) = \frac{4\sqrt{2}}{9} \right) & .4 = \left(\cos \left(2 \arcsin \left(\frac{5}{7} \right) \right) = \frac{-1}{49} \right) \\ .5 = \left(\arctan \left(\cos \left(\frac{3\pi}{2} \right) \right) + \sin \left(\frac{5\pi}{2} \right) \right) = \frac{\pi}{4} & .6 = \left(\sec \left(\arccos \left(\sin \left(-\frac{7\pi}{6} \right) \right) + \arcsin \left(\cos \left(\frac{8\pi}{3} \right) \right) \right) = \frac{2\sqrt{3}}{3} \right) \end{array} \right]$$

$$Ans5 = 2 \alpha \sqrt{1 - \alpha^2}, \quad \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$Ans6 = 1 - 2 \alpha^2, \quad \left[\begin{matrix} M \\ U \\ T \end{matrix} \right]$$

$$AnsI = \left[\begin{array}{lll} .1 = (\arcsin(0) = 0) & .2 = (\arctan(-\sqrt{3}) = -\frac{\pi}{3}) & .3 = \left(\arccos\left(-\frac{\sqrt{2}}{2}\right) = \frac{3\pi}{4}\right) \\ .4 = \left(\arccos\left(\frac{\sqrt{3}}{2}\right) = \frac{\pi}{6}\right) & .5 = (\arcsin(5) = \text{undefined}) & .6 = \left(\arcsin\left(\frac{\sqrt{2}}{2}\right) = \frac{\pi}{4}\right) \\ .7 = \left(\arctan(1) = \frac{\pi}{4}\right) & .8 = \left(\arcsin\left(-\frac{\sqrt{3}}{2}\right) = -\frac{\pi}{3}\right) & .9 = (\arccos(1) = 0) \end{array} \right],$$

$$\text{Ans2} = \left[\begin{array}{lll} .1 = \left(\sin \left(\arcsin \left(\frac{-1}{2} \right) \right) = \frac{-1}{2} \right) & .2 = \left(\tan \left(\arccos \left(-\frac{\sqrt{2}}{2} \right) \right) = -.1 \right) & .3 = \left(\sin \left(\arccos \left(\frac{1}{2} \right) \right) = \frac{\sqrt{3}}{2} \right) \\ .4 = \left(\cos \left(\arcsin \left(-\frac{\sqrt{2}}{2} \right) \right) = \frac{\sqrt{2}}{2} \right) & .5 = \left(\arccos \left(\cos \left(\frac{\pi}{6} \right) \right) = \frac{\pi}{6} \right) & .6 = \left(\arccos \left(\sin \left(-\frac{\pi}{4} \right) \right) = \frac{3\pi}{4} \right) \\ .7 = \left(\arcsin \left(\sin \left(-\frac{17\pi}{6} \right) \right) = -\frac{\pi}{6} \right) & .8 = \left(\arccos \left(\cos \left(\frac{5\pi}{3} \right) \right) = \frac{\pi}{3} \right) & .9 = \left(\arctan \left(\tan \left(\frac{5\pi}{6} \right) \right) = -\frac{\pi}{6} \right) \\ .10 = \left(\sec \left(\arcsin \left(\frac{1}{2} \right) \right) = \frac{2\sqrt{3}}{3} \right) & .11 = \left(\cot \left(\arccos \left(\sin \left(\frac{11\pi}{6} \right) \right) \right) = -\frac{\sqrt{3}}{3} \right) & .12 = \left(\arccos \left(\sin \left(\arccos \left(\frac{\sqrt{2}}{2} \right) \right) \right) = \frac{\pi}{4} \right) \end{array} \right]$$

$$Ans3 = \begin{bmatrix} .1 = \left(\sin \left(\arccos \left(\frac{2}{3} \right) \right) = \frac{\sqrt{5}}{3} \right) & .2 = \left(\cos \left(\arcsin \left(\frac{-1}{3} \right) \right) = \frac{2\sqrt{2}}{3} \right) & .3 = \left(\cos \left(\arctan \left(\frac{\sqrt{5}}{7} \right) \right) = \frac{7\sqrt{6}}{18} \right) \\ .4 = \left(\csc \left(\arctan(3) \right) = \frac{\sqrt{10}}{3} \right) & .5 = \left(\cot \left(\arcsin \left(\frac{3}{4} \right) \right) = \frac{\sqrt{7}}{3} \right) & .6 = \left(\tan \left(\arcsin \left(\frac{\sqrt{5}}{7} \right) \right) = \frac{\sqrt{11}\sqrt{5}}{22} \right) \\ .7 = \left(\sin \left(\arctan(-3) \right) = -\frac{3\sqrt{10}}{10} \right) & .8 = \left(\sec \left(\arccos \left(\frac{-1}{4} \right) \right) = 4 \right) & .9 = \left(\tan \left(\arccos \left(\frac{\sqrt{5}}{7} \right) \right) = \frac{2\sqrt{11}\sqrt{5}}{5} \right) \end{bmatrix}, \begin{bmatrix} M \\ a \\ t \\ h \\ @ \\ M \\ U \end{bmatrix}$$

$$Ans4 = \left[\begin{array}{ll} .1 = \left(\sin \left(\arccos \left(\frac{1}{6} \right) + \arcsin \left(\frac{-2}{3} \right) \right) = \frac{\sqrt{35}\sqrt{5}}{18} - \frac{1}{9} \right) & .2 = \left(\cos \left(\arccos \left(\frac{1}{5} \right) + \arcsin \left(\frac{1}{3} \right) \right) = \frac{2\sqrt{2}}{15} - \frac{2\sqrt{6}}{15} \right) \\ .3 = \left(\sin \left(2 \arcsin \left(\frac{1}{3} \right) \right) = \frac{4\sqrt{2}}{9} \right) & .4 = \left(\cos \left(2 \arcsin \left(\frac{1}{2} \right) \right) = \frac{1}{2} \right) \\ .5 = \left(\arctan \left(\cos \left(\frac{3\pi}{2} \right) + \sin \left(\frac{9\pi}{2} \right) \right) = \frac{\pi}{4} \right) & .6 = \left(\cot \left(\arccos \left(\sin \left(\frac{7\pi}{6} \right) \right) + \arcsin \left(\cos \left(\frac{11\pi}{3} \right) \right) \right) = -\sqrt{3} \right) \end{array} \right]$$

$$Ans5 = 2 \alpha \sqrt{1 - \alpha^2}, \quad \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$Ans6 = 2 \alpha^2 - 1, \quad , \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$Ans1 = \begin{bmatrix} .1 = \left(\arctan\left(-\frac{\sqrt{3}}{3}\right) = -\frac{\pi}{6} \right) & .2 = \left(\arcsin\left(\frac{1}{2}\right) = \frac{\pi}{6} \right) & .3 = (\arccos(-1) = \pi) \\ .4 = \left(\arccos\left(\frac{\sqrt{3}}{2}\right) = \frac{\pi}{6} \right) & .5 = (\arcsin(0) = 0) & .6 = (\arcsin(-\sqrt{2}) = \text{undefined}) \\ .7 = \left(\arctan(1) = \frac{\pi}{4} \right) & .8 = \left(\arccos\left(-\frac{\sqrt{3}}{2}\right) = \frac{5\pi}{6} \right) & .9 = \left(\arcsin\left(\frac{-1}{2}\right) = -\frac{\pi}{6} \right) \end{bmatrix}, \begin{bmatrix} M \\ a \\ t \\ h \\ @ \\ M \\ U \\ T \end{bmatrix}$$

$$Ans2 = \left[\begin{array}{lll} .1 = (\tan(\arctan(-\sqrt{3})) = -\sqrt{3}) & .2 = \left(\sin\left(\arccos\left(\frac{-1}{2}\right)\right) = \frac{\sqrt{3}}{2} \right) & .3 = \left(\tan\left(\arcsin\left(\frac{\sqrt{3}}{2}\right)\right) = \sqrt{3} \right) \\ .4 = \left(\cos\left(\arcsin\left(-\frac{\sqrt{2}}{2}\right)\right) = \frac{\sqrt{2}}{2} \right) & .5 = \left(\arccos\left(\cos\left(\frac{5\pi}{6}\right)\right) = \frac{5\pi}{6} \right) & .6 = \left(\arccos\left(\sin\left(\frac{\pi}{3}\right)\right) = \frac{\pi}{6} \right) \\ .7 = \left(\arcsin\left(\sin\left(\frac{7\pi}{6}\right)\right) = -\frac{\pi}{6} \right) & .8 = \left(\arccos\left(\cos\left(\frac{5\pi}{3}\right)\right) = \frac{\pi}{3} \right) & .9 = \left(\arctan\left(\tan\left(-\frac{17\pi}{6}\right)\right) = \frac{\pi}{6} \right) \\ .10 = \left(\csc\left(\arcsin\left(\frac{\sqrt{2}}{2}\right)\right) = \sqrt{2} \right) & .11 = \left(\tan\left(\arcsin\left(\cos\left(\frac{10\pi}{3}\right)\right)\right) = -\frac{\sqrt{3}}{3} \right) & .12 = \left(\arccos\left(\sin\left(\arccos\left(-\frac{\sqrt{3}}{2}\right)\right)\right) = \frac{\pi}{3} \right) \end{array} \right]$$

$$Ans3 = \left[\begin{array}{ccc} .1 = \left(\cos \left(\arctan \left(-\frac{\sqrt{3}}{4} \right) \right) = \frac{4\sqrt{19}}{19} \right) & .2 = \left(\sin \left(\arccos \left(-\frac{\sqrt{3}}{7} \right) \right) = \frac{\sqrt{46}}{7} \right) & .3 = \left(\cos \left(\arcsin \left(\frac{\sqrt{2}}{5} \right) \right) = \frac{\sqrt{23}}{5} \right) \\ .4 = \left(\sin \left(\arctan \left(\frac{3}{7} \right) \right) = \frac{3\sqrt{58}}{58} \right) & .5 = \left(\csc \left(\arcsin \left(-\frac{3}{7} \right) \right) = -\frac{7}{3} \right) & .6 = \left(\cot \left(\arccos \left(\frac{3}{4} \right) \right) = \frac{3\sqrt{7}}{7} \right) \\ .7 = \left(\tan \left(\arcsin \left(\frac{1}{4} \right) \right) = \frac{\sqrt{15}}{15} \right) & .8 = \left(\tan \left(\arccos \left(-\frac{1}{2} \right) \right) = -\sqrt{3} \right) & .9 = \left(\sec \left(\arctan \left(-\frac{5}{3} \right) \right) = \frac{\sqrt{34}}{3} \right) \end{array} \right],$$

$$Ans4 = \left[\begin{array}{ll} .1 = \left(\sin \left(\arccos \left(\frac{1}{3} \right) + \arcsin \left(\frac{-2}{5} \right) \right) = \frac{2\sqrt{2}\sqrt{21}}{15} - \frac{2}{15} \right) & .2 = \left(\cos \left(\arccos \left(\frac{1}{2} \right) + \arcsin \left(\frac{5}{6} \right) \right) = \frac{\sqrt{11}}{12} - \frac{5\sqrt{3}}{12} \right) \\ .3 = \left(\sin \left(2 \arccos \left(\frac{1}{3} \right) \right) = \frac{4\sqrt{2}}{9} \right) & .4 = \left(\cos \left(2 \arcsin \left(\frac{4}{9} \right) \right) = \frac{49}{81} \right) \\ .5 = \left(\arctan \left(\cos(3\pi) + \sin \left(-\frac{3\pi}{2} \right) \right) = 0 \right) & .6 = \left(\cot \left(\arccos \left(\sin \left(-\frac{7\pi}{6} \right) \right) + \arcsin \left(\cos \left(\frac{8\pi}{3} \right) \right) \right) = \sqrt{3} \right) \end{array} \right]$$

$$Ans5 = 2 \alpha \sqrt{1 - \alpha^2}, \quad \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$Ans6 = 1 - 2 \alpha^2, \quad , \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$Ans1 = \left[\begin{array}{lll} .1 = \left(\arctan(\sqrt{3}) = \frac{\pi}{3} \right) & .2 = \left(\arcsin(1) = \frac{\pi}{2} \right) & .3 = \left(\arcsin\left(\frac{\sqrt{2}}{2}\right) = \frac{\pi}{4} \right) \\ .4 = \left(\arccos\left(\frac{1}{2}\right) = \frac{\pi}{3} \right) & .5 = (\arccos(-1) = \pi) & .6 = (\arctan(0) = 0) \\ .7 = (\arccos(5) = \text{undefined}) & .8 = \left(\arccos\left(\frac{-1}{2}\right) = \frac{2\pi}{3} \right) & .9 = \left(\arcsin\left(-\frac{\sqrt{3}}{2}\right) = -\frac{\pi}{3} \right) \end{array} \right],$$

$$\text{Ans2} = \left[\begin{array}{lll} .1 = \left(\cos \left(\arccos \left(\frac{\sqrt{3}}{2} \right) \right) = \frac{\sqrt{3}}{2} \right) & .2 = \left(\cos(\arctan(-\sqrt{3})) = \frac{1}{2} \right) & .3 = \left(\tan \left(\arcsin \left(-\frac{\sqrt{3}}{2} \right) \right) = -\sqrt{3} \right) \\ .4 = \left(\sin \left(\arccos \left(-\frac{\sqrt{2}}{2} \right) \right) = \frac{\sqrt{2}}{2} \right) & .5 = \left(\arcsin \left(\sin \left(\frac{\pi}{6} \right) \right) = \frac{\pi}{6} \right) & .6 = \left(\arcsin \left(\cos \left(\frac{\pi}{6} \right) \right) = \frac{\pi}{3} \right) \\ .7 = \left(\arcsin \left(\sin \left(-\frac{5\pi}{6} \right) \right) = -\frac{\pi}{6} \right) & .8 = \left(\arccos \left(\cos \left(-\frac{\pi}{3} \right) \right) = \frac{\pi}{3} \right) & .9 = \left(\arctan \left(\tan \left(\frac{11\pi}{6} \right) \right) = -\frac{\pi}{6} \right) \\ .10 = \left(\cot \left(\arccos \left(-\frac{\sqrt{3}}{2} \right) \right) = -\sqrt{3} \right) & .11 = \left(\cot \left(\arccos \left(\sin \left(-\frac{13\pi}{6} \right) \right) \right) = -\frac{\sqrt{3}}{3} \right) & .12 = \left(\arccos \left(\sin \left(\arccos \left(\frac{-1}{2} \right) \right) \right) = \frac{\pi}{6} \right) \end{array} \right]$$

$$\text{Ans } 3 = \left[\begin{array}{lll} .1 = \left(\sin \left(\arccos \left(\frac{4}{7} \right) \right) \right) = \frac{\sqrt{33}}{7} & .2 = \left(\cos \left(\arctan \left(\frac{\sqrt{2}}{5} \right) \right) \right) = \frac{5\sqrt{3}}{9} & .3 = \left(\cos \left(\arcsin \left(\frac{\sqrt{5}}{7} \right) \right) \right) = \frac{2\sqrt{11}}{7} \\ .4 = \left(\cot \left(\arccos \left(\frac{\sqrt{3}}{7} \right) \right) \right) = -\frac{\sqrt{3}\sqrt{46}}{46} & .5 = \left(\sin \left(\arctan \left(\frac{5}{7} \right) \right) \right) = \frac{5\sqrt{74}}{74} & .6 = \left(\sec \left(\arcsin \left(\frac{-4}{7} \right) \right) \right) = \frac{7\sqrt{33}}{33} \\ .7 = \left(\tan \left(\arccos \left(\frac{1}{3} \right) \right) \right) = 2\sqrt{2} & .8 = \left(\tan \left(\arcsin \left(\frac{1}{4} \right) \right) \right) = \frac{\sqrt{15}}{15} & .9 = \left(\csc \left(\arctan \left(\frac{-6}{5} \right) \right) \right) = -\frac{\sqrt{61}}{6} \end{array} \right]$$

$$Ans4 = \left[\begin{array}{ll} .1 = \left(\sin \left(\arccos \left(\frac{1}{2} \right) + \arcsin \left(\frac{-2}{5} \right) \right) = \frac{\sqrt{3} \sqrt{21}}{10} - \frac{1}{5} \right. & .2 = \left(\cos \left(\arccos \left(\frac{5}{6} \right) + \arcsin \left(\frac{3}{4} \right) \right) = \frac{5\sqrt{7}}{24} - \frac{\sqrt{11}}{8} \right) \\ .3 = \left(\sin \left(2 \arccos \left(\frac{3}{4} \right) \right) = \frac{3\sqrt{7}}{8} \right) & .4 = \left(\cos \left(2 \arcsin \left(\frac{2}{7} \right) \right) = \frac{41}{49} \right) \\ .5 = \left(\arctan \left(\cos \left(2\pi \right) + \sin \left(2\pi \right) \right) = \frac{\pi}{4} \right) & .6 = \left(\cot \left(\arccos \left(\sin \left(\frac{11\pi}{6} \right) \right) + \arcsin \left(\cos \left(\frac{7\pi}{3} \right) \right) \right) = -\sqrt{3} \right) \end{array} \right]$$

$$Ans5 = 2 \alpha \sqrt{1 - \alpha^2}, \quad \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$Ans6 = 1 - 2 \alpha^2, \quad \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$Ans1 = \left[\begin{array}{ccc} .1 = \left(\arcsin\left(\frac{\sqrt{2}}{2}\right) = \frac{\pi}{4} \right) & .2 = \left(\arctan(\sqrt{3}) = \frac{\pi}{3} \right) & .3 = (\arctan(0) = 0) \\ .4 = \left(\arccos\left(-\frac{\sqrt{2}}{2}\right) = \frac{3\pi}{4} \right) & .5 = (\arcsin(3) = \text{undefined}) & .6 = \left(\arcsin\left(-\frac{\sqrt{3}}{2}\right) = -\frac{\pi}{3} \right) \\ .7 = \left(\arccos\left(\frac{1}{2}\right) = \frac{\pi}{3} \right) & .8 = \left(\arcsin(1) = \frac{\pi}{2} \right) & .9 = (\arccos(-1) = \pi) \end{array} \right], \left[\begin{array}{c} M \\ a \\ t \\ h \\ @ \\ M \\ U \\ T \end{array} \right]$$

$$\text{Ans 2} = \left[\begin{array}{lll} .1 = \left(\cos \left(\arccos \left(\frac{\sqrt{3}}{2} \right) \right) = \frac{\sqrt{3}}{2} \right) & .2 = \left(\sin \left(\arctan \left(-\frac{\sqrt{3}}{3} \right) \right) = -\frac{1}{2} \right) & .3 = \left(\tan \left(\arccos \left(\frac{\sqrt{2}}{2} \right) \right) = 1 \right) \\ .4 = \left(\cos \left(\arcsin \left(-\frac{\sqrt{2}}{2} \right) \right) = \frac{\sqrt{2}}{2} \right) & .5 = \left(\arcsin \left(\sin \left(\frac{\pi}{4} \right) \right) = \frac{\pi}{4} \right) & .6 = \left(\arcsin \left(\cos \left(\frac{2\pi}{3} \right) \right) = -\frac{\pi}{6} \right) \\ .7 = \left(\arcsin \left(\sin \left(-\frac{11\pi}{6} \right) \right) = \frac{\pi}{6} \right) & .8 = \left(\arccos \left(\cos \left(-\frac{5\pi}{6} \right) \right) = \frac{5\pi}{6} \right) & .9 = \left(\arctan \left(\tan \left(-\frac{17\pi}{6} \right) \right) = \frac{\pi}{6} \right) \\ .10 = \left(\sec \left(\arcsin \left(\frac{\sqrt{2}}{2} \right) \right) = \sqrt{2} \right) & .11 = \left(\csc \left(\arccos \left(\sin \left(\frac{7\pi}{6} \right) \right) \right) = \frac{2\sqrt{3}}{3} \right) & .12 = \left(\arccos \left(\sin \left(\arccos \left(\frac{1}{2} \right) \right) \right) = \frac{\pi}{6} \right) \end{array} \right]$$

$$Ans3 = \left[\begin{array}{l} .1 = \left(\cot \left(\arctan \left(\frac{\sqrt{7}}{4} \right) \right) = \frac{4\sqrt{7}}{7} \right) \quad .2 = \left(\sin \left(\arctan \left(\frac{-7}{6} \right) \right) = -\frac{7\sqrt{85}}{85} \right) \quad .3 = \left(\cos \left(\arctan(4) \right) = \frac{\sqrt{17}}{17} \right) \\ .4 = \left(\sec \left(\arcsin \left(\frac{\sqrt{3}}{5} \right) \right) = \frac{5\sqrt{22}}{22} \right) \quad .5 = \left(\cos \left(\arcsin \left(\frac{4}{7} \right) \right) = \frac{\sqrt{33}}{7} \right) \quad .6 = \left(\tan \left(\arcsin \left(\frac{-1}{6} \right) \right) = -\frac{\sqrt{35}}{35} \right) \\ .7 = \left(\sin \left(\arccos \left(\frac{-3}{5} \right) \right) = \frac{4}{5} \right) \quad .8 = \left(\csc \left(\arccos \left(-\frac{\sqrt{2}}{7} \right) \right) = \frac{7\sqrt{47}}{47} \right) \quad .9 = \left(\tan \left(\arccos \left(\frac{2}{7} \right) \right) = \frac{3\sqrt{5}}{2} \right) \end{array} \right], \left[\begin{array}{c} M \\ a \\ t \\ h \\ @ \\ M \\ U \\ P \end{array} \right]$$

$$Ans4 = \left[\begin{array}{ll} .1 = \left(\sin \left(\arccos \left(\frac{5}{8} \right) + \arcsin \left(\frac{3}{5} \right) \right) = \frac{\sqrt{39}}{10} + \frac{3}{8} \right) & .2 = \left(\cos \left(\arccos \left(\frac{1}{2} \right) + \arcsin \left(\frac{-2}{5} \right) \right) = \frac{\sqrt{21}}{10} + \frac{\sqrt{3}}{5} \right) \\ .3 = \left(\sin \left(2 \arcsin \left(\frac{5}{7} \right) \right) = \frac{20\sqrt{6}}{49} \right) & .4 = \left(\cos \left(2 \arccos \left(\frac{5}{8} \right) \right) = \frac{-7}{32} \right) \\ .5 = \left(\arctan \left(\cos \left(\frac{3\pi}{2} \right) + \sin \left(-\frac{7\pi}{2} \right) \right) = \frac{\pi}{4} \right) & .6 = \left(\sec \left(\arccos \left(\sin \left(-\frac{17\pi}{6} \right) \right) + \arcsin \left(\cos \left(\frac{5\pi}{3} \right) \right) \right) = -\frac{2\sqrt{3}}{3} \right) \end{array} \right]$$

$$Ans5 = 2 \alpha \sqrt{1 - \alpha^2}, \quad \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$Ans6 = 2\alpha^2 - 1, \quad \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$Ans1 = \begin{bmatrix} .1 = \left(\arcsin(1) = \frac{\pi}{2}\right) & .2 = \left(\arccos\left(\frac{-1}{2}\right) = \frac{2\pi}{3}\right) & .3 = \left(\arctan(1) = \frac{\pi}{4}\right) \\ .4 = \left(\arccos\left(\frac{1}{2}\right) = \frac{\pi}{3}\right) & .5 = (\arctan(0) = 0) & .6 = \left(\arcsin\left(-\frac{\sqrt{2}}{2}\right) = -\frac{\pi}{4}\right) \\ .7 = \left(\arcsin\left(\frac{\sqrt{3}}{2}\right) = \frac{\pi}{3}\right) & .8 = \left(\arccos(0) = \frac{\pi}{2}\right) & .9 = (\arcsin(\sqrt{3}) = undefined) \end{bmatrix}, \begin{bmatrix} M \\ a \\ t \\ h \\ @ \\ M \\ U \\ T \end{bmatrix}$$

$$\text{Ans2} = \left[\begin{array}{lll} .1 = \left(\tan(\arctan(-\sqrt{3})) \right) = -\sqrt{3} & .2 = \left(\sin(\arctan(1)) \right) = \frac{\sqrt{2}}{2} & .3 = \left(\tan\left(\arcsin\left(\frac{1}{2}\right)\right) = \frac{\sqrt{3}}{3} \right) \\ .4 = \left(\cos(\arctan(-1)) \right) = \frac{\sqrt{2}}{2} & .5 = \left(\arccos\left(\cos\left(\frac{\pi}{3}\right)\right) = \frac{\pi}{3} \right) & .6 = \left(\arccos\left(\sin\left(-\frac{\pi}{3}\right)\right) = \frac{5\pi}{6} \right) \\ .7 = \left(\arcsin\left(\sin\left(-\frac{7\pi}{6}\right)\right) = \frac{\pi}{6} \right) & .8 = \left(\arccos\left(\cos\left(\frac{10\pi}{3}\right)\right) = \frac{2\pi}{3} \right) & .9 = \left(\arctan\left(\tan\left(\frac{7\pi}{6}\right)\right) = \frac{\pi}{6} \right) \\ .10 = \left(\sec\left(\arctan\left(\frac{\sqrt{3}}{3}\right)\right) = \frac{2\sqrt{3}}{3} \right) & .11 = \left(\tan\left(\arccos\left(\sin\left(\frac{11\pi}{6}\right)\right)\right) = -\sqrt{3} \right) & .12 = \left(\arccos\left(\sin\left(\arccos\left(\frac{\sqrt{3}}{2}\right)\right)\right) = \frac{\pi}{3} \right) \end{array} \right]$$

$$Ans3 = \left[\begin{array}{lll} .1 = \left(\cos \left(\arctan \left(-\frac{\sqrt{7}}{3} \right) \right) = \frac{3}{4} \right) & .2 = \left(\csc \left(\arcsin \left(\frac{\sqrt{3}}{5} \right) \right) = \frac{8\sqrt{3}}{3} \right) & .3 = \left(\cot \left(\arctan \left(\frac{2}{5} \right) \right) = \frac{5}{2} \right) \\ .4 = \left(\tan \left(\arccos \left(-\frac{\sqrt{3}}{4} \right) \right) = -\frac{\sqrt{13}\sqrt{3}}{3} \right) & .5 = \left(\tan \left(\arcsin \left(\frac{2}{5} \right) \right) = \frac{2\sqrt{21}}{21} \right) & .6 = \left(\sec \left(\arccos \left(\frac{-4}{7} \right) \right) = \frac{-7}{4} \right) \\ .7 = \left(\sin \left(\arctan \left(\frac{-3}{5} \right) \right) = -\frac{3\sqrt{34}}{34} \right) & .8 = \left(\cos \left(\arcsin \left(\frac{-1}{6} \right) \right) = \frac{\sqrt{35}}{6} \right) & .9 = \left(\sin \left(\arccos \left(\frac{3}{7} \right) \right) = \frac{2\sqrt{10}}{7} \right) \end{array} \right],$$

$$Ans4 = \left[\begin{array}{ll} .1 = \left(\sin \left(\arccos \left(\frac{5}{9} \right) + \arcsin \left(\frac{4}{9} \right) \right) = \frac{2\sqrt{14}\sqrt{65}}{81} + \frac{20}{81} \right) & .2 = \left(\cos \left(\arccos \left(\frac{1}{2} \right) + \arcsin \left(\frac{-2}{5} \right) \right) = \frac{\sqrt{21}}{10} + \frac{\sqrt{3}}{5} \right) \\ .3 = \left(\sin \left(2 \arcsin \left(\frac{1}{6} \right) \right) = \frac{\sqrt{35}}{18} \right) & .4 = \left(\cos \left(2 \arcsin \left(\frac{5}{9} \right) \right) = \frac{31}{81} \right) \\ .5 = \left(\arctan \left(\cos \left(\frac{5\pi}{2} \right) + \sin \left(-\frac{5\pi}{2} \right) \right) = -\frac{\pi}{4} \right) & .6 = \left(\cot \left(\arccos \left(\sin \left(-\frac{11\pi}{6} \right) \right) + \arcsin \left(\cos \left(-\frac{2\pi}{3} \right) \right) \right) = \sqrt{3} \right) \end{array} \right]$$

$$Ans5 = 2 \alpha \sqrt{1 - \alpha^2}, \quad \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$Ans6 = 2 \alpha^2 - 1, \quad , \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

[illegible]