

$$No1 = \begin{bmatrix} .1 = \sin\left(\frac{5\pi}{12}\right) & .2 = \cos(105^\circ) \\ .3 = \tan\left(\frac{\pi}{12}\right) & .4 = \cot\left(-\frac{7\pi}{12}\right) \\ .5 = \tan(255^\circ) & .6 = \sec(165^\circ) \\ .7 = \cos\left(-\frac{5\pi}{12}\right) & .8 = \sin\left(-\frac{\pi}{12}\right) \end{bmatrix}, No2 = \begin{bmatrix} .1 = 2 \cos\left(\frac{\pi}{8}\right)^2 - 1 & .2 = \cos\left(\frac{19\pi}{60}\right) \cos\left(\frac{\pi}{15}\right) + \sin\left(\frac{19\pi}{60}\right) \sin\left(\frac{\pi}{15}\right) \\ .3 = 2 \sin(15^\circ) \cos(15^\circ) & .4 = \frac{2 \tan\left(\frac{\pi}{8}\right)}{1 - \tan\left(\frac{\pi}{8}\right)^2} \\ .5 = \frac{\tan(70^\circ) - \tan(10^\circ)}{1 + \tan(70^\circ) \tan(10^\circ)} & .6 = 1 - 2 \sin(22.5^\circ)^2 \\ .7 = \sin(40^\circ) \cos(10^\circ) - \cos(40^\circ) \sin(10^\circ) & .8 = \sin(80^\circ) \cos(10^\circ) + \cos(80^\circ) \sin(10^\circ) \\ .9 = \cos\left(\frac{\pi}{12}\right)^2 - \sin\left(\frac{\pi}{12}\right)^2 & .10 = \frac{\tan\left(\frac{5\pi}{36}\right) + \tan\left(\frac{\pi}{9}\right)}{1 - \tan\left(\frac{5\pi}{36}\right) \tan\left(\frac{\pi}{9}\right)} \end{bmatrix}, \begin{bmatrix} \frac{.1}{.2} \\ \frac{.3}{.4} \\ \frac{.5}{.6} \\ \frac{.7}{.8} \\ \frac{.9}{.10} \end{bmatrix} \& \begin{bmatrix} M \\ a \\ t \\ h \\ @ \\ M \\ U \\ T \end{bmatrix}$$

$$No3 = \left[ \begin{array}{c} \left[ A = 0, B = \frac{\pi}{2}, C = \frac{\pi}{2}, D = \pi \right] \\ \left[ Cond1 = \left( \cos(\alpha) = \frac{1}{2} \right), Cond2 = \left( \sin(\beta) = \frac{1}{6} \right) \right] \\ \left[ \begin{array}{cc} .1 = \sin(\alpha) & .2 = \cos(\beta) \\ .3 = \tan(\beta) & .4 = \sin(\beta - \alpha) \\ .5 = \cos(\alpha - \beta) & .6 = \tan(\alpha + \beta) \\ .7 = \cos(2\beta) & .8 = \tan(2\alpha) \end{array} \right] \end{array} \right], \quad No4 = \left[ \begin{array}{c} \left[ A = \pi, B = \frac{3\pi}{2}, C = \frac{3\pi}{2}, D = 2\pi \right] \\ \left[ Cond1 = \left( \cos(\alpha) = \frac{-1}{5} \right), Cond2 = \left( \sin(\beta) = \frac{-1}{2} \right) \right] \\ \left[ \begin{array}{cc} .1 = \sin(\alpha) & .2 = \cos(\beta) \\ .3 = \tan(\beta) & .4 = \sin(\alpha - \beta) \\ .5 = \cos(\alpha + \beta) & .6 = \tan(\beta - \alpha) \\ .7 = \cos(2\beta) & .8 = \tan(2\alpha) \end{array} \right] \end{array} \right]$$

$$No5 = [Cond = (\cos(12^\circ) = 0.978), Question = \cos(6^\circ)], \quad , \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$No6 = [Cond = (\cos(36^\circ) = 0.809), Question = \sin(18^\circ)], \quad , \quad \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$No1 = \begin{bmatrix} .1 = \sin\left(\frac{5\pi}{12}\right) & .2 = \cos(105^\circ) \\ .3 = \tan(15^\circ) & .4 = \sin((-345^\circ)) \\ .5 = \csc\left(-\frac{19\pi}{12}\right) & .6 = \sec(285^\circ) \\ .7 = \tan\left(\frac{17\pi}{12}\right) & .8 = \cos(345^\circ) \end{bmatrix}, No2 = \begin{bmatrix} .1 = \cos^2(22.5^\circ) - \sin^2(22.5^\circ) & .2 = 1 - 2\sin^2(15^\circ) \\ .3 = 2\sin\left(\frac{\pi}{12}\right)\cos\left(\frac{\pi}{12}\right) & .4 = \sin(20^\circ)\cos(10^\circ) + \cos(20^\circ)\sin(10^\circ) \\ .5 = \frac{\tan(60^\circ) - \tan(15^\circ)}{1 + \tan(60^\circ)\tan(15^\circ)} & .6 = \cos\left(\frac{\pi}{18}\right)\cos\left(\frac{5\pi}{18}\right) - \sin\left(\frac{\pi}{18}\right)\sin\left(\frac{5\pi}{18}\right) \\ .7 = \frac{2\tan\left(\frac{\pi}{12}\right)}{1 - \tan^2\left(\frac{\pi}{12}\right)} & .8 = 2\cos^2\left(\frac{\pi}{8}\right) - 1 \\ .9 = \sin(70^\circ)\cos(10^\circ) - \cos(70^\circ)\sin(10^\circ) & .10 = \cos\left(\frac{7\pi}{12}\right)\cos\left(\frac{\pi}{12}\right) + \sin\left(\frac{7\pi}{12}\right)\sin\left(\frac{\pi}{12}\right) \end{bmatrix}$$

$$No3 = \left[ \begin{array}{c} \left[ A = 0, B = \frac{\pi}{2}, C = \frac{\pi}{2}, D = \pi \right] \\ \left[ Cond1 = \left( \cos(\alpha) = \frac{5}{7} \right), Cond2 = \left( \sin(\beta) = \frac{5}{8} \right) \right] \\ \left[ \begin{array}{cc} .1 = \sin(\alpha) & .2 = \cos(\beta) \\ .3 = \tan(\beta) & .4 = \sin(\alpha - \beta) \\ .5 = \cos(\alpha + \beta) & .6 = \tan(\beta - \alpha) \\ .7 = \sin(2\alpha) & .8 = \tan(2\beta) \end{array} \right] \end{array} \right], \quad No4 = \left[ \begin{array}{c} \left[ A = \frac{3\pi}{2}, B = 2\pi, C = \pi, D = \frac{3\pi}{2} \right] \\ \left[ Cond1 = \left( \sin(\alpha) = \frac{-3}{8} \right), Cond2 = \left( \cos(\beta) = \frac{-2}{3} \right) \right] \\ \left[ \begin{array}{cc} .1 = \cos(\alpha) & .2 = \sin(\beta) \\ .3 = \tan(\beta) & .4 = \sin(\alpha + \beta) \\ .5 = \cos(\alpha - \beta) & .6 = \tan(\beta - \alpha) \\ .7 = \sin(2\alpha) & .8 = \tan(2\beta) \end{array} \right] \end{array} \right]$$

$$No5 = [Cond = (\cos(58^\circ) = 0.530), Question = \sin(29^\circ)], \quad , \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$No6 = [Cond = (\cos(26^\circ) = 0.899), Question = \cos(13^\circ)], \quad , \quad \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$





$$No1 = \begin{bmatrix} .1 = \cos\left(\frac{7\pi}{12}\right) & .2 = \sin(75^\circ) \\ .3 = \tan(15^\circ) & .4 = \sec(255^\circ) \\ .5 = \csc\left(\frac{19\pi}{12}\right) & .6 = \tan((-105)^\circ) \\ .7 = \cos\left(\frac{11\pi}{12}\right) & .8 = \cot((-285)^\circ) \end{bmatrix}, No2 = \begin{bmatrix} .1 = \sin(65^\circ)\cos(20^\circ) - \cos(65^\circ)\sin(20^\circ) & .2 = \sin\left(\frac{\pi}{18}\right)\cos\left(\frac{4\pi}{9}\right) + \cos\left(\frac{\pi}{18}\right)\sin\left(\frac{4\pi}{9}\right) \\ .3 = \cos\left(\frac{\pi}{8}\right)^2 - \sin\left(\frac{\pi}{8}\right)^2 & .4 = \frac{2\tan(15^\circ)}{1 - \tan(15^\circ)^2} \\ .5 = 1 - 2\sin(15^\circ)^2 & .6 = 2\sin\left(\frac{\pi}{12}\right)\cos\left(\frac{\pi}{12}\right) \\ .7 = 2\cos(22.5^\circ)^2 - 1 & .8 = \cos\left(\frac{17\pi}{30}\right)\cos\left(\frac{\pi}{15}\right) + \sin\left(\frac{17\pi}{30}\right)\sin\left(\frac{\pi}{15}\right) \\ .9 = \cos(12^\circ)\cos(48^\circ) - \sin(12^\circ)\sin(48^\circ) & .10 = \frac{\tan(35^\circ) - \tan(5^\circ)}{1 + \tan(35^\circ)\tan(5^\circ)} \end{bmatrix}, \begin{bmatrix} :) \\ :( \\ \left[ \begin{matrix} P \\ V \\ S \\ S \end{matrix} \right] \\ \& \\ \left[ \begin{matrix} M \\ a \\ t \\ h \\ @ \\ M \\ U \\ T \end{matrix} \right] \\ :) \\ :( \\ :) \\ :( \end{bmatrix}$$

$$No3 = \left[ \begin{array}{c} \left[ A = 0, B = \frac{\pi}{2}, C = \pi, D = \frac{3\pi}{2} \right] \\ \left[ Cond1 = \left( \cos(\alpha) = \frac{2}{3} \right), Cond2 = \left( \sin(\beta) = \frac{-3}{7} \right) \right] \\ \left[ \begin{array}{cc} .1 = \sin(\alpha) & .2 = \cos(\beta) \\ .3 = \tan(\beta) & .4 = \sin(\beta - \alpha) \\ .5 = \cos(\alpha - \beta) & .6 = \tan(\alpha + \beta) \\ .7 = \cos(2\alpha) & .8 = \tan(2\beta) \end{array} \right] \end{array} \right], \quad No4 = \left[ \begin{array}{c} \left[ A = \frac{\pi}{2}, B = \pi, C = \frac{3\pi}{2}, D = 2\pi \right] \\ \left[ Cond1 = \left( \cos(\alpha) = \frac{-4}{9} \right), Cond2 = \left( \sin(\beta) = \frac{-1}{2} \right) \right] \\ \left[ \begin{array}{cc} .1 = \sin(\alpha) & .2 = \cos(\beta) \\ .3 = \tan(\alpha) & .4 = \sin(\alpha - \beta) \\ .5 = \cos(\beta - \alpha) & .6 = \tan(\alpha + \beta) \\ .7 = \cos(2\alpha) & .8 = \tan(2\beta) \end{array} \right] \end{array} \right]$$

$$No5 = [Cond = (\cos(8^\circ) = 0.990), Question = \sin(4^\circ)], \quad \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$No6 = [Cond = (\cos(28^\circ) = 0.883), Question = \cos(14^\circ)], \quad \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$No1 = \begin{bmatrix} .1 = \cos(15^\circ) & .2 = \sin\left(\frac{7\pi}{12}\right) \\ .3 = \tan(75^\circ) & .4 = \sin\left(-\frac{5\pi}{12}\right) \\ .5 = \csc(285^\circ) & .6 = \cot((-285)^\circ) \\ .7 = \tan\left(\frac{11\pi}{12}\right) & .8 = \sec\left(\frac{17\pi}{12}\right) \end{bmatrix}, No2 = \begin{bmatrix} .1 = \frac{\tan(60^\circ) - \tan(15^\circ)}{1 + \tan(60^\circ)\tan(15^\circ)} & .2 = \cos\left(\frac{5\pi}{18}\right)\cos\left(\frac{\pi}{9}\right) + \sin\left(\frac{5\pi}{18}\right)\sin\left(\frac{\pi}{9}\right) \\ .3 = \cos\left(\frac{\pi}{15}\right)\cos\left(\frac{11\pi}{60}\right) - \sin\left(\frac{\pi}{15}\right)\sin\left(\frac{11\pi}{60}\right) & .4 = 2\cos(15^\circ)^2 - 1 \\ .5 = \frac{2\tan(22.5^\circ)}{1 - \tan(22.5^\circ)^2} & .6 = 1 - 2\sin(22.5^\circ)^2 \\ .7 = \cos\left(\frac{\pi}{12}\right)^2 - \sin\left(\frac{\pi}{12}\right)^2 & .8 = \sin\left(\frac{4\pi}{9}\right)\cos\left(\frac{\pi}{9}\right) - \cos\left(\frac{4\pi}{9}\right)\sin\left(\frac{\pi}{9}\right) \\ .9 = \frac{\tan(48^\circ) + \tan(12^\circ)}{1 - \tan(48^\circ)\tan(12^\circ)} & .10 = 2\sin\left(\frac{\pi}{8}\right)\cos\left(\frac{\pi}{8}\right) \end{bmatrix}, \begin{bmatrix} \div \\ \div( \\ \left[ \begin{bmatrix} P \\ V \\ S \\ S \end{bmatrix} \right] \\ \& \\ \left[ \begin{bmatrix} M \\ a \\ t \\ h \\ @ \\ M \\ U \\ T \end{bmatrix} \right] \\ \div \\ \div( \\ \div \\ \div( \end{bmatrix}$$

$$No3 = \begin{bmatrix} \left[ A = 0, B = \frac{\pi}{2}, C = \frac{3\pi}{2}, D = 2\pi \right] \\ \left[ Cond1 = \left( \cos(\alpha) = \frac{3}{4} \right), Cond2 = \left( \sin(\beta) = \frac{-2}{3} \right) \right] \\ \left[ \begin{bmatrix} .1 = \sin(\alpha) & .2 = \cos(\beta) \\ .3 = \tan(\beta) & .4 = \sin(\alpha + \beta) \\ .5 = \cos(\beta - \alpha) & .6 = \tan(\alpha - \beta) \\ .7 = \sin(2\beta) & .8 = \tan(2\alpha) \end{bmatrix} \right] \end{bmatrix}, No4 = \begin{bmatrix} \left[ A = \frac{\pi}{2}, B = \pi, C = \pi, D = \frac{3\pi}{2} \right] \\ \left[ Cond1 = \left( \sin(\alpha) = \frac{1}{2} \right), Cond2 = \left( \cos(\beta) = \frac{-4}{9} \right) \right] \\ \left[ \begin{bmatrix} .1 = \cos(\alpha) & .2 = \sin(\beta) \\ .3 = \tan(\alpha) & .4 = \sin(\alpha - \beta) \\ .5 = \cos(\alpha + \beta) & .6 = \tan(\beta - \alpha) \\ .7 = \sin(2\alpha) & .8 = \tan(2\beta) \end{bmatrix} \right] \end{bmatrix}$$

$$No5 = [Cond = (\cos(64^\circ) = 0.438), Question = \sin(32^\circ)], \quad , \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$No6 = [Cond = (\cos(40^\circ) = 0.766), Question = \cos(20^\circ)], \quad , \quad \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$No1 = \begin{bmatrix} .1 = \cos(105^\circ) & .2 = \sin\left(\frac{5\pi}{12}\right) \\ .3 = \tan\left(\frac{\pi}{12}\right) & .4 = \csc((-75)^\circ) \\ .5 = \sec\left(-\frac{7\pi}{12}\right) & .6 = \cos((-255)^\circ) \\ .7 = \cot\left(\frac{23\pi}{12}\right) & .8 = \tan\left(\frac{19\pi}{12}\right) \end{bmatrix}, No2 = \begin{bmatrix} .1 = \frac{\tan(72^\circ) - \tan(12^\circ)}{1 + \tan(72^\circ)\tan(12^\circ)} & .2 = 2\sin(22.5^\circ)\cos(22.5^\circ) \\ .3 = \sin\left(\frac{\pi}{12}\right)\cos\left(\frac{5\pi}{12}\right) + \cos\left(\frac{\pi}{12}\right)\sin\left(\frac{5\pi}{12}\right) & .4 = \cos(15^\circ)^2 - \sin(15^\circ)^2 \\ .5 = \frac{\tan\left(\frac{\pi}{18}\right) + \tan\left(\frac{7\pi}{36}\right)}{1 - \tan\left(\frac{\pi}{18}\right)\tan\left(\frac{7\pi}{36}\right)} & .6 = 2\cos\left(\frac{\pi}{12}\right)^2 - 1 \\ .7 = \sin(50^\circ)\cos(20^\circ) - \cos(50^\circ)\sin(20^\circ) & .8 = \frac{2\tan(22.5^\circ)}{1 - \tan(22.5^\circ)^2} \\ .9 = 1 - 2\sin\left(\frac{\pi}{8}\right)^2 & .10 = \cos\left(\frac{7\pi}{12}\right)\cos\left(\frac{\pi}{12}\right) + \sin\left(\frac{7\pi}{12}\right)\sin\left(\frac{\pi}{12}\right) \end{bmatrix}, \begin{bmatrix} \frac{\cdot}{\cdot} \\ \cdot(\cdot) \\ \left[\begin{matrix} P \\ V \\ S \\ S \end{matrix}\right] \\ \& \\ \left[\begin{matrix} M \\ a \\ t \\ h \\ @ \\ M \\ U \\ T \end{matrix}\right] \\ \frac{\cdot}{\cdot} \\ \cdot(\cdot) \\ \frac{\cdot}{\cdot} \\ \cdot(\cdot) \end{bmatrix}$$

$$No3 = \left[ \begin{array}{c} \left[ A = 0, B = \frac{\pi}{2}, C = \frac{\pi}{2}, D = \pi \right] \\ \left[ Cond1 = \left( \cos(\alpha) = \frac{1}{6} \right), Cond2 = \left( \sin(\beta) = \frac{5}{8} \right) \right] \\ \left[ \begin{array}{cc} .1 = \sin(\alpha) & .2 = \cos(\beta) \\ .3 = \tan(\beta) & .4 = \sin(\alpha + \beta) \\ .5 = \cos(\alpha - \beta) & .6 = \tan(\beta - \alpha) \\ .7 = \sin(2\alpha) & .8 = \tan(2\beta) \end{array} \right] \end{array} \right], \quad No4 = \left[ \begin{array}{c} \left[ A = \pi, B = \frac{3\pi}{2}, C = \frac{3\pi}{2}, D = 2\pi \right] \\ \left[ Cond1 = \left( \sin(\alpha) = \frac{-1}{6} \right), Cond2 = \left( \cos(\beta) = \frac{2}{3} \right) \right] \\ \left[ \begin{array}{cc} .1 = \cos(\alpha) & .2 = \sin(\beta) \\ .3 = \tan(\alpha) & .4 = \sin(\alpha - \beta) \\ .5 = \cos(\beta - \alpha) & .6 = \tan(\alpha + \beta) \\ .7 = \cos(2\beta) & .8 = \tan(2\alpha) \end{array} \right] \end{array} \right]$$

$$No5 = [Cond = (\cos(6^\circ) = 0.995), Question = \sin(3^\circ)], \quad \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$No6 = [Cond = (\cos(52^\circ) = 0.616), Question = \cos(26^\circ)], \quad \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$





$$No1 = \begin{bmatrix} .1 = \sin\left(\frac{5\pi}{12}\right) & .2 = \cos(105^\circ) \\ .3 = \tan\left(\frac{\pi}{12}\right) & .4 = \cot\left(-\frac{19\pi}{12}\right) \\ .5 = \sec(165^\circ) & .6 = \tan((-75^\circ)) \\ .7 = \cos\left(\frac{17\pi}{12}\right) & .8 = \sin(345^\circ) \end{bmatrix}, No2 = \begin{bmatrix} .1 = \cos(15^\circ)^2 - \sin(15^\circ)^2 & .2 = \sin(15^\circ)\cos(75^\circ) + \cos(15^\circ)\sin(75^\circ) \\ .3 = \frac{\tan(50^\circ) - \tan(20^\circ)}{1 + \tan(50^\circ)\tan(20^\circ)} & .4 = \frac{2\tan\left(\frac{\pi}{8}\right)}{1 - \tan\left(\frac{\pi}{8}\right)^2} \\ .5 = 2\sin\left(\frac{\pi}{8}\right)\cos\left(\frac{\pi}{8}\right) & .6 = \cos\left(\frac{13\pi}{36}\right)\cos\left(\frac{\pi}{9}\right) + \sin\left(\frac{13\pi}{36}\right)\sin\left(\frac{\pi}{9}\right) \\ .7 = 1 - 2\sin\left(\frac{\pi}{12}\right)^2 & .8 = \frac{\tan(20^\circ) + \tan(40^\circ)}{1 - \tan(20^\circ)\tan(40^\circ)} \\ .9 = \cos\left(\frac{\pi}{10}\right)\cos\left(\frac{\pi}{15}\right) - \sin\left(\frac{\pi}{10}\right)\sin\left(\frac{\pi}{15}\right) & .10 = 2\cos(22.5^\circ)^2 - 1 \end{bmatrix}, \begin{bmatrix} \div \\ \div( \\ \left[ \begin{bmatrix} P \\ V \\ S \\ S \end{bmatrix} \right. \\ \& \\ \left. \left[ \begin{bmatrix} M \\ a \\ t \\ h \\ @ \\ M \\ U \\ T \end{bmatrix} \right] \right. \\ \div \\ \div( \\ \div \\ \div( \end{bmatrix}$$

$$No3 = \left[ \begin{array}{c} \left[ A = 0, B = \frac{\pi}{2}, C = \frac{\pi}{2}, D = \pi \right] \\ \left[ Cond1 = \left( \cos(\alpha) = \frac{4}{9} \right), Cond2 = \left( \sin(\beta) = \frac{1}{2} \right) \right] \\ \left[ \begin{array}{cc} .1 = \sin(\alpha) & .2 = \cos(\beta) \\ .3 = \tan(\beta) & .4 = \sin(\alpha + \beta) \\ .5 = \cos(\beta - \alpha) & .6 = \tan(\alpha - \beta) \\ .7 = \cos(2\alpha) & .8 = \tan(2\beta) \end{array} \right] \end{array} \right], \quad No4 = \left[ \begin{array}{c} \left[ A = \pi, B = \frac{3\pi}{2}, C = \frac{3\pi}{2}, D = 2\pi \right] \\ \left[ Cond1 = \left( \sin(\alpha) = \frac{-5}{8} \right), Cond2 = \left( \cos(\beta) = \frac{5}{6} \right) \right] \\ \left[ \begin{array}{cc} .1 = \cos(\alpha) & .2 = \sin(\beta) \\ .3 = \tan(\beta) & .4 = \sin(\alpha + \beta) \\ .5 = \cos(\beta - \alpha) & .6 = \tan(\alpha - \beta) \\ .7 = \cos(2\beta) & .8 = \tan(2\alpha) \end{array} \right] \end{array} \right]$$

$$No5 = [Cond = (\cos(64^\circ) = 0.438), Question = \cos(32^\circ)], \quad , \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$No6 = [Cond = (\cos(36^\circ) = 0.809), Question = \sin(18^\circ)], \quad \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$No1 = \begin{bmatrix} .1 = \cos(105^\circ) & .2 = \sin\left(\frac{\pi}{12}\right) \\ .3 = \tan(75^\circ) & .4 = \tan\left(-\frac{17\pi}{12}\right) \\ .5 = \sec((-15^\circ)) & .6 = \cos(345^\circ) \\ .7 = \csc\left(-\frac{13\pi}{12}\right) & .8 = \cot\left(-\frac{19\pi}{12}\right) \end{bmatrix}, No2 = \begin{bmatrix} .1 = 2 \sin(15^\circ) \cos(15^\circ) & .2 = \sin(60^\circ) \cos(15^\circ) - \cos(60^\circ) \sin(15^\circ) \\ .3 = 1 - 2 \sin\left(\frac{\pi}{8}\right)^2 & .4 = 2 \cos\left(\frac{\pi}{12}\right)^2 - 1 \\ .5 = \cos(70^\circ) \cos(20^\circ) - \sin(70^\circ) \sin(20^\circ) & .6 = \cos(22.5^\circ)^2 - \sin(22.5^\circ)^2 \\ .7 = \sin\left(\frac{11\pi}{60}\right) \cos\left(\frac{\pi}{15}\right) + \cos\left(\frac{11\pi}{60}\right) \sin\left(\frac{\pi}{15}\right) & .8 = \frac{2 \tan\left(\frac{\pi}{8}\right)}{1 - \tan\left(\frac{\pi}{8}\right)^2} \\ .9 = \cos(102^\circ) \cos(12^\circ) + \sin(102^\circ) \sin(12^\circ) & .10 = \frac{\tan\left(\frac{2\pi}{9}\right) + \tan\left(\frac{\pi}{9}\right)}{1 - \tan\left(\frac{2\pi}{9}\right) \tan\left(\frac{\pi}{9}\right)} \end{bmatrix}, \begin{bmatrix} \vdots \\ \vdots \\ P \\ V \\ S \\ S \\ \& \\ M \\ a \\ t \\ h \\ @ \\ M \\ U \\ T \\ \vdots \\ \vdots \\ \vdots \\ \vdots \end{bmatrix}$$

$$No3 = \left[ \begin{array}{c} \left[ A = 0, B = \frac{\pi}{2}, C = \frac{\pi}{2}, D = \pi \right] \\ \left[ Cond1 = \left( \sin(\alpha) = \frac{1}{4} \right), Cond2 = \left( \cos(\beta) = \frac{-3}{8} \right) \right] \\ \left[ \begin{array}{cc} .1 = \cos(\alpha) & .2 = \sin(\beta) \\ .3 = \tan(\alpha) & .4 = \sin(\alpha + \beta) \\ .5 = \cos(\alpha - \beta) & .6 = \tan(\beta - \alpha) \\ .7 = \cos(2\beta) & .8 = \tan(2\alpha) \end{array} \right] \end{array} \right], \quad No4 = \left[ \begin{array}{c} \left[ A = \frac{3\pi}{2}, B = 2\pi, C = \pi, D = \frac{3\pi}{2} \right] \\ \left[ Cond1 = \left( \cos(\alpha) = \frac{1}{3} \right), Cond2 = \left( \sin(\beta) = \frac{-2}{3} \right) \right] \\ \left[ \begin{array}{cc} .1 = \sin(\alpha) & .2 = \cos(\beta) \\ .3 = \tan(\beta) & .4 = \sin(\beta - \alpha) \\ .5 = \cos(\alpha + \beta) & .6 = \tan(\alpha - \beta) \\ .7 = \sin(2\alpha) & .8 = \tan(2\beta) \end{array} \right] \end{array} \right]$$

$$No5 = [Cond = (\cos(54^\circ) = 0.588), Question = \sin(27^\circ)], \quad , \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$No6 = [Cond = (\cos(32^\circ) = 0.848), Question = \cos(16^\circ)], \quad , \quad \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$No1 = \begin{bmatrix} .1 = \sin\left(\frac{\pi}{12}\right) & .2 = \cos(105^\circ) \\ .3 = \tan\left(\frac{5\pi}{12}\right) & .4 = \sec((-165)^\circ) \\ .5 = \sin\left(-\frac{19\pi}{12}\right) & .6 = \cot((-75)^\circ) \\ .7 = \cos\left(\frac{19\pi}{12}\right) & .8 = \tan(195^\circ) \end{bmatrix}, No2 = \begin{bmatrix} .1 = \cos\left(\frac{\pi}{8}\right)^2 - \sin\left(\frac{\pi}{8}\right)^2 & .2 = 2 \sin(15^\circ) \cos(15^\circ) \\ .3 = 1 - 2 \sin\left(\frac{\pi}{12}\right)^2 & .4 = \frac{2 \tan(22.5^\circ)}{1 - \tan(22.5^\circ)^2} \\ .5 = \sin(12^\circ) \cos(48^\circ) + \cos(12^\circ) \sin(48^\circ) & .6 = \frac{\tan(35^\circ) - \tan(5^\circ)}{1 + \tan(35^\circ) \tan(5^\circ)} \\ .7 = \frac{\tan\left(\frac{5\pi}{36}\right) + \tan\left(\frac{\pi}{36}\right)}{1 - \tan\left(\frac{5\pi}{36}\right) \tan\left(\frac{\pi}{36}\right)} & .8 = \sin(65^\circ) \cos(20^\circ) - \cos(65^\circ) \sin(20^\circ) \\ .9 = \cos\left(\frac{17\pi}{30}\right) \cos\left(\frac{\pi}{15}\right) + \sin\left(\frac{17\pi}{30}\right) \sin\left(\frac{\pi}{15}\right) & .10 = 2 \cos(22.5^\circ)^2 - 1 \end{bmatrix}, \begin{bmatrix} \div \\ \div( \\ \left[ \begin{bmatrix} P \\ V \\ S \\ S \end{bmatrix} \right] \\ \& \\ \left[ \begin{bmatrix} M \\ a \\ t \\ h \\ @ \\ M \\ U \\ T \end{bmatrix} \right] \\ \div \\ \div( \\ \div \\ \div( \end{bmatrix}$$

$$No3 = \left[ \begin{array}{c} \left[ A = 0, B = \frac{\pi}{2}, C = \frac{\pi}{2}, D = \pi \right] \\ \left[ Cond1 = \left( \sin(\alpha) = \frac{1}{6} \right), Cond2 = \left( \cos(\beta) = \frac{-5}{6} \right) \right] \\ \left[ \begin{array}{cc} .1 = \cos(\alpha) & .2 = \sin(\beta) \\ .3 = \tan(\alpha) & .4 = \sin(\alpha - \beta) \\ .5 = \cos(\beta - \alpha) & .6 = \tan(\alpha + \beta) \\ .7 = \cos(2\alpha) & .8 = \tan(2\beta) \end{array} \right] \end{array} \right], \quad No4 = \left[ \begin{array}{c} \left[ A = \frac{3\pi}{2}, B = 2\pi, C = \pi, D = \frac{3\pi}{2} \right] \\ \left[ Cond1 = \left( \sin(\alpha) = \frac{-1}{6} \right), Cond2 = \left( \cos(\beta) = \frac{-1}{3} \right) \right] \\ \left[ \begin{array}{cc} .1 = \cos(\alpha) & .2 = \sin(\beta) \\ .3 = \tan(\beta) & .4 = \sin(\beta - \alpha) \\ .5 = \cos(\alpha + \beta) & .6 = \tan(\alpha - \beta) \\ .7 = \cos(2\beta) & .8 = \tan(2\alpha) \end{array} \right] \end{array} \right]$$

$$No5 = [Cond = (\cos(22^\circ) = 0.927), Question = \sin(11^\circ)], \quad , \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$No6 = [Cond = (\cos(42^\circ) = 0.743), Question = \cos(21^\circ)], \quad , \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$



$$No1 = \begin{bmatrix} .1 = \cos(75^\circ) & .2 = \sin\left(\frac{7\pi}{12}\right) \\ .3 = \tan\left(\frac{\pi}{12}\right) & .4 = \sec\left(\frac{11\pi}{12}\right) \\ .5 = \tan((-15)^\circ) & .6 = \sin(255^\circ) \\ .7 = \cot\left(\frac{23\pi}{12}\right) & .8 = \csc((-105)^\circ) \end{bmatrix}, No2 = \begin{bmatrix} .1 = \cos(70^\circ)\cos(10^\circ) + \sin(70^\circ)\sin(10^\circ) & .2 = 2\sin(15^\circ)\cos(15^\circ) \\ .3 = \sin\left(\frac{7\pi}{18}\right)\cos\left(\frac{\pi}{9}\right) + \cos\left(\frac{7\pi}{18}\right)\sin\left(\frac{\pi}{9}\right) & .4 = \cos^2\left(\frac{\pi}{12}\right) - \sin^2\left(\frac{\pi}{12}\right) \\ .5 = 1 - 2\sin(22.5^\circ)^2 & .6 = 2\cos^2\left(\frac{\pi}{8}\right) - 1 \\ .7 = \frac{\tan\left(\frac{7\pi}{30}\right) - \tan\left(\frac{\pi}{15}\right)}{1 + \tan\left(\frac{7\pi}{30}\right)\tan\left(\frac{\pi}{15}\right)} & .8 = \cos(5^\circ)\cos(25^\circ) - \sin(5^\circ)\sin(25^\circ) \\ .9 = \frac{2\tan(22.5^\circ)}{1 - \tan(22.5^\circ)^2} & .10 = \frac{\tan(12^\circ) + \tan(33^\circ)}{1 - \tan(12^\circ)\tan(33^\circ)} \end{bmatrix}, \begin{bmatrix} \frac{:}{P} \\ \frac{:}{V} \\ S \\ S \\ \& \\ M \\ a \\ t \\ h \\ @ \\ M \\ U \\ T \\ \frac{:}{T} \\ \frac{:}{U} \\ \frac{:}{S} \\ \frac{:}{P} \end{bmatrix}$$

$$No3 = \left[ \begin{array}{c} \left[ A = 0, B = \frac{\pi}{2}, C = \frac{3\pi}{2}, D = 2\pi \right] \\ \left[ Cond1 = \left( \sin(\alpha) = \frac{3}{4} \right), Cond2 = \left( \cos(\beta) = \frac{4}{5} \right) \right] \\ \left[ \begin{array}{cc} .1 = \cos(\alpha) & .2 = \sin(\beta) \\ .3 = \tan(\beta) & .4 = \sin(\alpha + \beta) \\ .5 = \cos(\beta - \alpha) & .6 = \tan(\alpha - \beta) \\ .7 = \sin(2\beta) & .8 = \tan(2\alpha) \end{array} \right] \end{array} \right], \quad No4 = \left[ \begin{array}{c} \left[ A = \frac{\pi}{2}, B = \pi, C = \pi, D = \frac{3\pi}{2} \right] \\ \left[ Cond1 = \left( \cos(\alpha) = \frac{-4}{5} \right), Cond2 = \left( \sin(\beta) = \frac{-2}{3} \right) \right] \\ \left[ \begin{array}{cc} .1 = \sin(\alpha) & .2 = \cos(\beta) \\ .3 = \tan(\alpha) & .4 = \sin(\alpha + \beta) \\ .5 = \cos(\alpha - \beta) & .6 = \tan(\beta - \alpha) \\ .7 = \cos(2\beta) & .8 = \tan(2\alpha) \end{array} \right] \end{array} \right]$$

$$No5 = [Cond = (\cos(32^\circ) = 0.848), Question = \sin(16^\circ)], \quad , \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$No6 = [Cond = (\cos(52^\circ) = 0.616), Question = \cos(26^\circ)], \quad , \quad \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$



$$No1 = \begin{bmatrix} .1 = \sin(105^\circ) & .2 = \cos\left(\frac{5\pi}{12}\right) \\ .3 = \tan(15^\circ) & .4 = \sin((-75)^\circ) \\ .5 = \tan\left(-\frac{7\pi}{12}\right) & .6 = \cos((-165)^\circ) \\ .7 = \cot\left(-\frac{17\pi}{12}\right) & .8 = \csc((-285)^\circ) \end{bmatrix}, No2 = \begin{bmatrix} .1 = \sin\left(\frac{11\pi}{36}\right)\cos\left(\frac{\pi}{18}\right) - \cos\left(\frac{11\pi}{36}\right)\sin\left(\frac{\pi}{18}\right) & .2 = \cos\left(\frac{11\pi}{18}\right)\cos\left(\frac{\pi}{9}\right) + \sin\left(\frac{11\pi}{18}\right)\sin\left(\frac{\pi}{9}\right) \\ .3 = \frac{2\tan(22.5^\circ)}{1 - \tan(22.5^\circ)^2} & .4 = \cos\left(\frac{\pi}{12}\right)^2 - \sin\left(\frac{\pi}{12}\right)^2 \\ .5 = \sin(20^\circ)\cos(10^\circ) + \cos(20^\circ)\sin(10^\circ) & .6 = \frac{\tan(85^\circ) - \tan(25^\circ)}{1 + \tan(85^\circ)\tan(25^\circ)} \\ .7 = 1 - 2\sin\left(\frac{\pi}{8}\right)^2 & .8 = 2\cos(22.5^\circ)^2 - 1 \\ .9 = 2\sin(15^\circ)\cos(15^\circ) & .10 = \cos\left(\frac{\pi}{9}\right)\cos\left(\frac{5\pi}{36}\right) - \sin\left(\frac{\pi}{9}\right)\sin\left(\frac{5\pi}{36}\right) \end{bmatrix}, \begin{bmatrix} \frac{.}{.} \\ \frac{.}{.} \\ \frac{.}{.} \\ \frac{.}{.} \\ \frac{.}{.} \\ \frac{.}{.} \\ \frac{.}{.} \\ \frac{.}{.} \\ \frac{.}{.} \\ \frac{.}{.} \end{bmatrix} \& \begin{bmatrix} M \\ a \\ t \\ h \\ @ \\ M \\ U \\ T \end{bmatrix}$$

$$No3 = \begin{bmatrix} \left[ A = 0, B = \frac{\pi}{2}, C = \frac{3\pi}{2}, D = 2\pi \right] \\ \left[ Cond1 = \left( \cos(\alpha) = \frac{3}{5} \right), Cond2 = \left( \sin(\beta) = \frac{-3}{8} \right) \right] \\ \left[ \begin{bmatrix} .1 = \sin(\alpha) & .2 = \cos(\beta) \\ .3 = \tan(\beta) & .4 = \sin(\alpha + \beta) \\ .5 = \cos(\alpha - \beta) & .6 = \tan(\beta - \alpha) \\ .7 = \sin(2\beta) & .8 = \tan(2\alpha) \end{bmatrix} \right] \end{bmatrix}, No4 = \begin{bmatrix} \left[ A = \frac{\pi}{2}, B = \pi, C = \pi, D = \frac{3\pi}{2} \right] \\ \left[ Cond1 = \left( \sin(\alpha) = \frac{1}{2} \right), Cond2 = \left( \cos(\beta) = \frac{-5}{8} \right) \right] \\ \left[ \begin{bmatrix} .1 = \cos(\alpha) & .2 = \sin(\beta) \\ .3 = \tan(\beta) & .4 = \sin(\alpha - \beta) \\ .5 = \cos(\alpha + \beta) & .6 = \tan(\beta - \alpha) \\ .7 = \sin(2\alpha) & .8 = \tan(2\beta) \end{bmatrix} \right] \end{bmatrix}$$

$$No5 = [Cond = (\cos(70^\circ) = 0.342), Question = \sin(35^\circ)], \quad , \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$No6 = [Cond = (\cos(48^\circ) = 0.669), Question = \cos(24^\circ)], \quad \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$No1 = \begin{bmatrix} .1 = \cos\left(\frac{5\pi}{12}\right) & .2 = \sin(15^\circ) \\ .3 = \tan(105^\circ) & .4 = \sec((-285)^\circ) \\ .5 = \cot\left(\frac{13\pi}{12}\right) & .6 = \csc((-195)^\circ) \\ .7 = \cos\left(-\frac{\pi}{12}\right) & .8 = \tan(165^\circ) \end{bmatrix}, No2 = \begin{bmatrix} .1 = \frac{\tan(50^\circ) + \tan(10^\circ)}{1 - \tan(50^\circ)\tan(10^\circ)} & .2 = \frac{2 \tan\left(\frac{\pi}{12}\right)}{1 - \tan\left(\frac{\pi}{12}\right)^2} \\ .3 = \cos\left(\frac{\pi}{12}\right)^2 - \sin\left(\frac{\pi}{12}\right)^2 & .4 = 2 \cos(15^\circ)^2 - 1 \\ .5 = \cos(55^\circ)\cos(10^\circ) + \sin(55^\circ)\sin(10^\circ) & .6 = \sin\left(\frac{5\pi}{9}\right)\cos\left(\frac{\pi}{18}\right) - \cos\left(\frac{5\pi}{9}\right)\sin\left(\frac{\pi}{18}\right) \\ .7 = 2 \sin\left(\frac{\pi}{8}\right)\cos\left(\frac{\pi}{8}\right) & .8 = \sin(12^\circ)\cos(18^\circ) + \cos(12^\circ)\sin(18^\circ) \\ .9 = 1 - 2 \sin(22.5^\circ)^2 & .10 = \cos\left(\frac{\pi}{18}\right)\cos\left(\frac{4\pi}{9}\right) - \sin\left(\frac{\pi}{18}\right)\sin\left(\frac{4\pi}{9}\right) \end{bmatrix}, \begin{bmatrix} \frac{\cdot}{\cdot} \\ \cdot( \\ P \\ V \\ S \\ S \\ \& \\ M \\ a \\ t \\ h \\ @ \\ M \\ U \\ T \\ \frac{\cdot}{\cdot} \\ \cdot( \\ \frac{\cdot}{\cdot} \\ \cdot( \end{bmatrix}$$

$$No3 = \left[ \begin{array}{c} \left[ A = 0, B = \frac{\pi}{2}, C = \frac{\pi}{2}, D = \pi \right] \\ \left[ Cond1 = \left( \sin(\alpha) = \frac{5}{8} \right), Cond2 = \left( \cos(\beta) = \frac{-1}{6} \right) \right] \\ \left[ \begin{array}{cc} .1 = \cos(\alpha) & .2 = \sin(\beta) \\ .3 = \tan(\beta) & .4 = \sin(\beta - \alpha) \\ .5 = \cos(\alpha - \beta) & .6 = \tan(\alpha + \beta) \\ .7 = \sin(2\alpha) & .8 = \tan(2\beta) \end{array} \right] \end{array} \right], \quad No4 = \left[ \begin{array}{c} \left[ A = \frac{3\pi}{2}, B = 2\pi, C = \pi, D = \frac{3\pi}{2} \right] \\ \left[ Cond1 = \left( \sin(\alpha) = \frac{-2}{3} \right), Cond2 = \left( \cos(\beta) = \frac{-1}{2} \right) \right] \\ \left[ \begin{array}{cc} .1 = \cos(\alpha) & .2 = \sin(\beta) \\ .3 = \tan(\alpha) & .4 = \sin(\alpha + \beta) \\ .5 = \cos(\beta - \alpha) & .6 = \tan(\alpha - \beta) \\ .7 = \sin(2\alpha) & .8 = \tan(2\beta) \end{array} \right] \end{array} \right]$$

$$No5 = [Cond = (\cos(78^\circ) = 0.208), Question = \sin(39^\circ)], \quad , \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$No6 = [Cond = (\cos(34^\circ) = 0.829), Question = \cos(17^\circ)], \quad , \quad \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$



$$No1 = \begin{bmatrix} .1 = \cos(75^\circ) & .2 = \sin\left(\frac{7\pi}{12}\right) \\ .3 = \tan\left(\frac{\pi}{12}\right) & .4 = \cot\left(-\frac{19\pi}{12}\right) \\ .5 = \csc(255^\circ) & .6 = \tan\left(-\frac{23\pi}{12}\right) \\ .7 = \sin(165^\circ) & .8 = \cos(345^\circ) \end{bmatrix}, No2 = \begin{bmatrix} .1 = \frac{\tan(20^\circ) + \tan(40^\circ)}{1 - \tan(20^\circ)\tan(40^\circ)} & .2 = \sin\left(\frac{7\pi}{30}\right)\cos\left(\frac{\pi}{15}\right) - \cos\left(\frac{7\pi}{30}\right)\sin\left(\frac{\pi}{15}\right) \\ .3 = \frac{2\tan(15^\circ)}{1 - \tan(15^\circ)^2} & .4 = 2\cos\left(\frac{\pi}{12}\right)^2 - 1 \\ .5 = \cos\left(\frac{\pi}{8}\right)^2 - \sin\left(\frac{\pi}{8}\right)^2 & .6 = \frac{\tan(85^\circ) - \tan(25^\circ)}{1 + \tan(85^\circ)\tan(25^\circ)} \\ .7 = \sin(20^\circ)\cos(10^\circ) + \cos(20^\circ)\sin(10^\circ) & .8 = 1 - 2\sin(15^\circ)^2 \\ .9 = 2\sin(22.5^\circ)\cos(22.5^\circ) & .10 = \cos\left(\frac{\pi}{3}\right)\cos\left(\frac{\pi}{12}\right) + \sin\left(\frac{\pi}{3}\right)\sin\left(\frac{\pi}{12}\right) \end{bmatrix}, \begin{bmatrix} \frac{\cdot}{\cdot} \\ \cdot( \\ \left[ \begin{bmatrix} P \\ V \\ S \\ S \end{bmatrix} \right] \\ \& \\ \left[ \begin{bmatrix} M \\ a \\ t \\ h \\ @ \\ M \\ U \\ T \end{bmatrix} \right] \\ \frac{\cdot}{\cdot} \\ \cdot( \\ \frac{\cdot}{\cdot} \\ \cdot( \end{bmatrix}$$

$$No3 = \left[ \begin{array}{c} \left[ A = 0, B = \frac{\pi}{2}, C = \pi, D = \frac{3\pi}{2} \right] \\ \left[ Cond1 = \left( \cos(\alpha) = \frac{5}{8} \right), Cond2 = \left( \sin(\beta) = \frac{-1}{2} \right) \right] \\ \left[ \begin{array}{cc} .1 = \sin(\alpha) & .2 = \cos(\beta) \\ .3 = \tan(\alpha) & .4 = \sin(\beta - \alpha) \\ .5 = \cos(\alpha + \beta) & .6 = \tan(\alpha - \beta) \\ .7 = \sin(2\beta) & .8 = \tan(2\alpha) \end{array} \right] \end{array} \right], \quad No4 = \left[ \begin{array}{c} \left[ A = \frac{\pi}{2}, B = \pi, C = \frac{3\pi}{2}, D = 2\pi \right] \\ \left[ Cond1 = \left( \sin(\alpha) = \frac{1}{2} \right), Cond2 = \left( \cos(\beta) = \frac{5}{7} \right) \right] \\ \left[ \begin{array}{cc} .1 = \cos(\alpha) & .2 = \sin(\beta) \\ .3 = \tan(\alpha) & .4 = \sin(\alpha - \beta) \\ .5 = \cos(\alpha + \beta) & .6 = \tan(\beta - \alpha) \\ .7 = \cos(2\alpha) & .8 = \tan(2\beta) \end{array} \right] \end{array} \right]$$

$$No5 = [Cond = (\cos(30^\circ) = 0.866), Question = \cos(15^\circ)], \quad , \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$No6 = [Cond = (\cos(74^\circ) = 0.276), Question = \sin(37^\circ)], \quad \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$







$$No1 = \begin{bmatrix} .1 = \sin(75^\circ) & .2 = \cos\left(\frac{\pi}{12}\right) \\ .3 = \tan(105^\circ) & .4 = \sin\left(\frac{19\pi}{12}\right) \\ .5 = \cot((-255)^\circ) & .6 = \csc\left(-\frac{23\pi}{12}\right) \\ .7 = \tan((-165)^\circ) & .8 = \cos((-285)^\circ) \end{bmatrix}, No2 = \begin{bmatrix} .1 = \cos(20^\circ) \cos(25^\circ) - \sin(20^\circ) \sin(25^\circ) & .2 = 2 \sin\left(\frac{\pi}{8}\right) \cos\left(\frac{\pi}{8}\right) \\ .3 = 2 \cos(22.5^\circ)^2 - 1 & .4 = \sin\left(\frac{\pi}{18}\right) \cos\left(\frac{\pi}{9}\right) + \cos\left(\frac{\pi}{18}\right) \sin\left(\frac{\pi}{9}\right) \\ .5 = \frac{\tan(48^\circ) + \tan(12^\circ)}{1 - \tan(48^\circ) \tan(12^\circ)} & .6 = \cos(102^\circ) \cos(12^\circ) + \sin(102^\circ) \sin(12^\circ) \\ .7 = \cos\left(\frac{\pi}{12}\right)^2 - \sin\left(\frac{\pi}{12}\right)^2 & .8 = \frac{2 \tan(15^\circ)}{1 - \tan(15^\circ)^2} \\ .9 = \sin\left(\frac{17\pi}{36}\right) \cos\left(\frac{5\pi}{36}\right) - \cos\left(\frac{17\pi}{36}\right) \sin\left(\frac{5\pi}{36}\right) & .10 = 1 - 2 \sin(15^\circ)^2 \end{bmatrix}, \begin{bmatrix} \frac{.}{.} \\ \frac{.}{.} \\ \left[ \begin{bmatrix} P \\ V \\ S \\ S \end{bmatrix} \right] \\ \& \\ \left[ \begin{bmatrix} M \\ a \\ t \\ h \\ @ \\ M \\ U \\ T \end{bmatrix} \right] \\ \frac{.}{.} \\ \frac{.}{.} \\ \frac{.}{.} \\ \frac{.}{.} \end{bmatrix}$$

$$No3 = \begin{bmatrix} \begin{bmatrix} A = 0, B = \frac{\pi}{2}, C = \frac{3\pi}{2}, D = 2\pi \end{bmatrix} \\ \begin{bmatrix} Cond1 = \left( \cos(\alpha) = \frac{4}{9} \right), Cond2 = \left( \sin(\beta) = \frac{-1}{3} \right) \end{bmatrix} \\ \begin{bmatrix} \begin{bmatrix} .1 = \sin(\alpha) & .2 = \cos(\beta) \\ .3 = \tan(\beta) & .4 = \sin(\beta - \alpha) \\ .5 = \cos(\alpha + \beta) & .6 = \tan(\alpha - \beta) \\ .7 = \cos(2\beta) & .8 = \tan(2\alpha) \end{bmatrix} \end{bmatrix}, No4 = \begin{bmatrix} \begin{bmatrix} A = \frac{\pi}{2}, B = \pi, C = \pi, D = \frac{3\pi}{2} \end{bmatrix} \\ \begin{bmatrix} Cond1 = \left( \cos(\alpha) = \frac{-1}{3} \right), Cond2 = \left( \sin(\beta) = \frac{-1}{2} \right) \end{bmatrix} \\ \begin{bmatrix} \begin{bmatrix} .1 = \sin(\alpha) & .2 = \cos(\beta) \\ .3 = \tan(\alpha) & .4 = \sin(\beta - \alpha) \\ .5 = \cos(\alpha - \beta) & .6 = \tan(\alpha + \beta) \\ .7 = \sin(2\beta) & .8 = \tan(2\alpha) \end{bmatrix} \end{bmatrix}$$

$$No5 = [Cond = (\cos(28^\circ) = 0.883), Question = \cos(14^\circ)], \quad \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$No6 = [Cond = (Cos(8^\circ) = 0.990), Question = Sin(4^\circ)], \quad , \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$



$$No1 = \begin{bmatrix} .1 = \sin\left(\frac{5\pi}{12}\right) & .2 = \cos(105^\circ) \\ .3 = \tan(15^\circ) & .4 = \tan(195^\circ) \\ .5 = \sin\left(-\frac{19\pi}{12}\right) & .6 = \cot(255^\circ) \\ .7 = \sec\left(-\frac{11\pi}{12}\right) & .8 = \csc\left(-\frac{5\pi}{12}\right) \end{bmatrix}, No2 = \begin{bmatrix} .1 = \cos\left(\frac{4\pi}{9}\right)\cos\left(\frac{\pi}{9}\right) + \sin\left(\frac{4\pi}{9}\right)\sin\left(\frac{\pi}{9}\right) & .2 = \frac{\tan(42^\circ) - \tan(12^\circ)}{1 + \tan(42^\circ)\tan(12^\circ)} \\ .3 = \frac{2\tan\left(\frac{\pi}{12}\right)}{1 - \tan\left(\frac{\pi}{12}\right)^2} & .4 = 2\sin(15^\circ)\cos(15^\circ) \\ .5 = 2\cos\left(\frac{\pi}{12}\right)^2 - 1 & .6 = 1 - 2\sin(22.5^\circ)^2 \\ .7 = \cos\left(\frac{\pi}{8}\right)^2 - \sin\left(\frac{\pi}{8}\right)^2 & .8 = \sin(35^\circ)\cos(25^\circ) + \cos(35^\circ)\sin(25^\circ) \\ .9 = \frac{\tan\left(\frac{\pi}{10}\right) + \tan\left(\frac{\pi}{15}\right)}{1 - \tan\left(\frac{\pi}{10}\right)\tan\left(\frac{\pi}{15}\right)} & .10 = \cos\left(\frac{\pi}{9}\right)\cos\left(\frac{5\pi}{36}\right) - \sin\left(\frac{\pi}{9}\right)\sin\left(\frac{5\pi}{36}\right) \end{bmatrix}, \begin{bmatrix} \frac{.}{.} \\ \left[ \begin{array}{c} P \\ V \\ S \\ S \end{array} \right] \\ \& \\ \left[ \begin{array}{c} M \\ a \\ t \\ h \\ @ \\ M \\ U \\ T \end{array} \right] \\ \frac{.}{.} \\ \frac{.}{.} \\ \frac{.}{.} \\ \frac{.}{.} \end{bmatrix}$$

$$No3 = \left[ \begin{array}{c} \left[ A = 0, B = \frac{\pi}{2}, C = \pi, D = \frac{3\pi}{2} \right] \\ \left[ Cond1 = \left( \cos(\alpha) = \frac{4}{9} \right), Cond2 = \left( \sin(\beta) = \frac{-1}{4} \right) \right] \\ \left[ \begin{array}{cc} .1 = \sin(\alpha) & .2 = \cos(\beta) \\ .3 = \tan(\beta) & .4 = \sin(\alpha + \beta) \\ .5 = \cos(\alpha - \beta) & .6 = \tan(\beta - \alpha) \\ .7 = \cos(2\beta) & .8 = \tan(2\alpha) \end{array} \right] \end{array} \right], \quad No4 = \left[ \begin{array}{c} \left[ A = \frac{\pi}{2}, B = \pi, C = \frac{3\pi}{2}, D = 2\pi \right] \\ \left[ Cond1 = \left( \sin(\alpha) = \frac{5}{7} \right), Cond2 = \left( \cos(\beta) = \frac{1}{2} \right) \right] \\ \left[ \begin{array}{cc} .1 = \cos(\alpha) & .2 = \sin(\beta) \\ .3 = \tan(\alpha) & .4 = \sin(\alpha - \beta) \\ .5 = \cos(\alpha + \beta) & .6 = \tan(\beta - \alpha) \\ .7 = \sin(2\beta) & .8 = \tan(2\alpha) \end{array} \right] \end{array} \right]$$

$$No5 = [Cond = (\cos(72^\circ) = 0.309), Question = \cos(36^\circ)], \quad , \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$No6 = [Cond = (\cos(12^\circ) = 0.978), Question = \sin(6^\circ)], \quad \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$No1 = \begin{bmatrix} .1 = \sin(75^\circ) & .2 = \cos\left(\frac{\pi}{12}\right) \\ .3 = \tan\left(\frac{7\pi}{12}\right) & .4 = \tan((-285)^\circ) \\ .5 = \cos\left(-\frac{7\pi}{12}\right) & .6 = \cot\left(\frac{23\pi}{12}\right) \\ .7 = \csc(165^\circ) & .8 = \sec\left(\frac{13\pi}{12}\right) \end{bmatrix}, No2 = \begin{bmatrix} .1 = 2 \cos(22.5^\circ)^2 - 1 & .2 = \sin\left(\frac{\pi}{12}\right) \cos\left(\frac{5\pi}{12}\right) + \cos\left(\frac{\pi}{12}\right) \sin\left(\frac{5\pi}{12}\right) \\ .3 = \frac{\tan(50^\circ) + \tan(10^\circ)}{1 - \tan(50^\circ) \tan(10^\circ)} & .4 = 1 - 2 \sin\left(\frac{\pi}{8}\right)^2 \\ .5 = \cos(15^\circ)^2 - \sin(15^\circ)^2 & .6 = \frac{\tan(40^\circ) - \tan(10^\circ)}{1 + \tan(40^\circ) \tan(10^\circ)} \\ .7 = \sin\left(\frac{5\pi}{9}\right) \cos\left(\frac{\pi}{18}\right) - \cos\left(\frac{5\pi}{9}\right) \sin\left(\frac{\pi}{18}\right) & .8 = \frac{2 \tan\left(\frac{\pi}{8}\right)}{1 - \tan\left(\frac{\pi}{8}\right)^2} \\ .9 = \cos(20^\circ) \cos(25^\circ) - \sin(20^\circ) \sin(25^\circ) & .10 = 2 \sin\left(\frac{\pi}{12}\right) \cos\left(\frac{\pi}{12}\right) \end{bmatrix}, \begin{bmatrix} \therefore \\ \therefore ( \\ \left[ \begin{matrix} P \\ V \\ S \\ S \end{matrix} \right] \\ \& \\ \left[ \begin{matrix} M \\ a \\ t \\ h \\ @ \\ M \\ U \\ T \end{matrix} \right] \\ \therefore \\ \therefore ( \\ \therefore \\ \therefore ( \end{bmatrix}$$

$$No3 = \begin{bmatrix} \begin{bmatrix} A = 0, B = \frac{\pi}{2}, C = \pi, D = \frac{3\pi}{2} \end{bmatrix} \\ \begin{bmatrix} Cond1 = \left( \cos(\alpha) = \frac{3}{8} \right), Cond2 = \left( \sin(\beta) = \frac{-1}{2} \right) \end{bmatrix} \\ \begin{bmatrix} \begin{bmatrix} .1 = \sin(\alpha) & .2 = \cos(\beta) \\ .3 = \tan(\beta) & .4 = \sin(\beta - \alpha) \\ .5 = \cos(\alpha - \beta) & .6 = \tan(\alpha + \beta) \\ .7 = \sin(2\alpha) & .8 = \tan(2\beta) \end{bmatrix} \end{bmatrix}, No4 = \begin{bmatrix} \begin{bmatrix} A = \frac{3\pi}{2}, B = 2\pi, C = \frac{\pi}{2}, D = \pi \end{bmatrix} \\ \begin{bmatrix} Cond1 = \left( \sin(\alpha) = \frac{-5}{7} \right), Cond2 = \left( \cos(\beta) = \frac{-1}{2} \right) \end{bmatrix} \\ \begin{bmatrix} \begin{bmatrix} .1 = \cos(\alpha) & .2 = \sin(\beta) \\ .3 = \tan(\beta) & .4 = \sin(\beta - \alpha) \\ .5 = \cos(\alpha - \beta) & .6 = \tan(\alpha + \beta) \\ .7 = \sin(2\alpha) & .8 = \tan(2\beta) \end{bmatrix} \end{bmatrix}$$

$$No5 = [Cond = (\cos(18^\circ) = 0.951), Question = \sin(9^\circ)], \quad , \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$No6 = [Cond = (\cos(64^\circ) = 0.438), Question = \cos(32^\circ)], \quad , \quad \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$



$$No1 = \begin{bmatrix} .1 = \cos\left(\frac{7\pi}{12}\right) & .2 = \sin(15^\circ) \\ .3 = \tan(75^\circ) & .4 = \sec(345^\circ) \\ .5 = \csc\left(-\frac{23\pi}{12}\right) & .6 = \cos\left(-\frac{13\pi}{12}\right) \\ .7 = \cot(195^\circ) & .8 = \tan\left(\frac{11\pi}{12}\right) \end{bmatrix}, No2 = \begin{bmatrix} .1 = \sin\left(\frac{19\pi}{60}\right)\cos\left(\frac{\pi}{15}\right) - \cos\left(\frac{19\pi}{60}\right)\sin\left(\frac{\pi}{15}\right) & .2 = \cos\left(\frac{4\pi}{9}\right)\cos\left(\frac{\pi}{9}\right) + \sin\left(\frac{4\pi}{9}\right)\sin\left(\frac{\pi}{9}\right) \\ .3 = \frac{\tan(25^\circ) + \tan(20^\circ)}{1 - \tan(25^\circ)\tan(20^\circ)} & .4 = 2\cos\left(\frac{\pi}{12}\right)^2 - 1 \\ .5 = 2\sin(22.5^\circ)\cos(22.5^\circ) & .6 = \cos\left(\frac{\pi}{8}\right)^2 - \sin\left(\frac{\pi}{8}\right)^2 \\ .7 = \frac{\tan(50^\circ) - \tan(20^\circ)}{1 + \tan(50^\circ)\tan(20^\circ)} & .8 = \frac{2\tan(22.5^\circ)}{1 - \tan(22.5^\circ)^2} \\ .9 = \sin\left(\frac{\pi}{18}\right)\cos\left(\frac{5\pi}{18}\right) + \cos\left(\frac{\pi}{18}\right)\sin\left(\frac{5\pi}{18}\right) & .10 = 1 - 2\sin(15^\circ)^2 \end{bmatrix}, \begin{bmatrix} \frac{.)}{:(} \\ \left[ \begin{matrix} P \\ V \\ S \\ S \end{matrix} \right] \\ \& \\ \left[ \begin{matrix} M \\ a \\ t \\ h \\ @ \\ M \\ U \\ T \end{matrix} \right] \\ \frac{.)}{:(} \\ \frac{.)}{:(} \\ \frac{.)}{:(} \end{bmatrix}$$

$$No3 = \left[ \begin{array}{c} \left[ A = 0, B = \frac{\pi}{2}, C = \pi, D = \frac{3\pi}{2} \right] \\ \left[ Cond1 = \left( \sin(\alpha) = \frac{1}{2} \right), Cond2 = \left( \cos(\beta) = \frac{-5}{9} \right) \right] \\ \left[ \begin{array}{cc} .1 = \cos(\alpha) & .2 = \sin(\beta) \\ .3 = \tan(\beta) & .4 = \sin(\alpha - \beta) \\ .5 = \cos(\beta - \alpha) & .6 = \tan(\alpha + \beta) \\ .7 = \cos(2\alpha) & .8 = \tan(2\beta) \end{array} \right] \end{array} \right], \quad No4 = \left[ \begin{array}{c} \left[ A = \frac{\pi}{2}, B = \pi, C = \frac{3\pi}{2}, D = 2\pi \right] \\ \left[ Cond1 = \left( \cos(\alpha) = \frac{-3}{4} \right), Cond2 = \left( \sin(\beta) = \frac{-1}{4} \right) \right] \\ \left[ \begin{array}{cc} .1 = \sin(\alpha) & .2 = \cos(\beta) \\ .3 = \tan(\beta) & .4 = \sin(\alpha + \beta) \\ .5 = \cos(\alpha - \beta) & .6 = \tan(\beta - \alpha) \\ .7 = \sin(2\alpha) & .8 = \tan(2\beta) \end{array} \right] \end{array} \right]$$

$$No5 = [Cond = (\cos(26^\circ) = 0.899), Question = \sin(13^\circ)], \quad \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

$$No6 = [Cond = (\cos(56^\circ) = 0.559), Question = \cos(28^\circ)], \quad , \quad \begin{bmatrix} M \\ U \\ T \end{bmatrix}$$

