

$$\begin{aligned}
 &Ans1 = (k = 33), \quad , \quad Ans2 = (k = 6), \quad , \quad Ans3 = \begin{bmatrix} a = -36 \\ b = 1 \end{bmatrix}, \quad , \quad Ans4 = \begin{bmatrix} a = 6 \\ b = 4 \end{bmatrix} \\
 &Ans5 = \begin{bmatrix} .1 = (2, 7) \\ .2 = (7, 42) \\ .3 = 7 \\ .4 = (3, 10) \\ .5 = 3 \\ .6 = 2 \end{bmatrix}, \quad , \quad Ans6 = \begin{bmatrix} .1 = [f(a) = 27] \\ .2 = [f(b) = 33.72, h = 0.2, RateOfChange = 33.600] \\ .3 = [f(c) = 30.28, h = 0.1, RateOfChange = 32.800] \\ .4 = [f(d) = 27.3208, h = 0.01, RateOfChange = 32.080] \\ .5 = [RateOfChange \text{ at the point } a = 32] \end{bmatrix} \\
 &Ans7 = \begin{bmatrix} .1 = [f(r) = 2 \pi r] \\ .2 = [f(r + h) = 2 \pi (r + h)] \\ .3 = \left[\frac{2 \pi (r + h) - 2 \pi r}{h} \right] \\ [.4 = [2 \pi], .5 = [2 \pi], .6 = [2 \pi]] \end{bmatrix}, \quad , \quad Ans8 = \begin{bmatrix} .1 = [f(r) = \pi r^2] \\ .2 = [f(r + h) = \pi (r + h)^2] \\ .3 = \left[\frac{\pi (r + h)^2 - \pi r^2}{h} \right] \\ [.4 = [2 \pi r], .5 = [6 \pi], .6 = [8 \pi]] \end{bmatrix} \\
 &Ans9 = \begin{bmatrix} .1 = \left[f(x) = \frac{\sqrt{3} x^2}{4} \right] \\ .2 = \left[f(x + h) = \frac{\sqrt{3} (x + h)^2}{4} \right] \\ .3 = \left[\frac{\frac{\sqrt{3} (x + h)^2}{4} - \frac{\sqrt{3} x^2}{4}}{h} \right] \\ \left[.4 = \left[\frac{\sqrt{3} x}{2} \right], .5 = [2 \sqrt{3}], .6 = \left[\frac{7 \sqrt{3}}{2} \right] \right] \end{bmatrix}, \quad , \quad \begin{bmatrix} M \\ a \\ t \\ h \\ @ \\ M \\ U \\ T \end{bmatrix}
 \end{aligned}$$

$$Ans9 = \left[\begin{array}{l} .1 = \left[f(x) = \frac{\sqrt{3} x^2}{4} \right] \\ .2 = \left[f(x+h) = \frac{\sqrt{3} (x+h)^2}{4} \right] \\ .3 = \left[\frac{\frac{\sqrt{3} (x+h)^2}{4} - \frac{\sqrt{3} x^2}{4}}{h} \right] \\ \left[.4 = \left[\frac{\sqrt{3} x}{2} \right], .5 = [3\sqrt{3}], .6 = \left[\frac{5\sqrt{3}}{2} \right] \right] \end{array} \right], \quad , \quad \left[\begin{array}{c} M \\ a \\ t \\ h \\ @ \\ M \\ U \\ T \end{array} \right]$$

$$Ans9 = \left[\begin{array}{l} .1 = \left[f(x) = \frac{\sqrt{3} x^2}{4} \right] \\ .2 = \left[f(x+h) = \frac{\sqrt{3} (x+h)^2}{4} \right] \\ .3 = \left[\frac{\frac{\sqrt{3} (x+h)^2}{4} - \frac{\sqrt{3} x^2}{4}}{h} \right] \\ \left[.4 = \left[\frac{\sqrt{3} x}{2} \right], .5 = [3\sqrt{3}], .6 = \left[\frac{7\sqrt{3}}{2} \right] \right] \end{array} \right], \quad , \quad \left[\begin{array}{c} M \\ a \\ t \\ h \\ @ \\ M \\ U \\ T \end{array} \right]$$

$$Ans9 = \left[\begin{array}{l} .1 = \left[f(x) = \frac{\sqrt{3} x^2}{4} \right] \\ .2 = \left[f(x+h) = \frac{\sqrt{3} (x+h)^2}{4} \right] \\ .3 = \left[\frac{\frac{\sqrt{3} (x+h)^2}{4} - \frac{\sqrt{3} x^2}{4}}{h} \right] \\ .4 = \left[\frac{\sqrt{3} x}{2} \right], .5 = \left[\frac{5\sqrt{3}}{2} \right], .6 = [3\sqrt{3}] \end{array} \right], \quad \left[\begin{array}{c} M \\ a \\ t \\ h \\ @ \\ M \\ U \\ T \end{array} \right]$$

$$Ans9 = \left[\begin{array}{l} .1 = \left[f(x) = \frac{\sqrt{3} x^2}{4} \right] \\ .2 = \left[f(x+h) = \frac{\sqrt{3} (x+h)^2}{4} \right] \\ .3 = \left[\frac{\frac{\sqrt{3} (x+h)^2}{4} - \frac{\sqrt{3} x^2}{4}}{h} \right] \\ .4 = \left[\frac{\sqrt{3} x}{2} \right], .5 = [4 \sqrt{3}], .6 = [2 \sqrt{3}] \end{array} \right], \quad , \quad \left[\begin{array}{l} M \\ a \\ t \\ h \\ @ \\ M \\ U \\ T \end{array} \right]$$

$$Ans9 = \left[\begin{array}{l} .1 = \left[f(x) = \frac{\sqrt{3} x^2}{4} \right] \\ .2 = \left[f(x+h) = \frac{\sqrt{3} (x+h)^2}{4} \right] \\ .3 = \left[\frac{\frac{\sqrt{3} (x+h)^2}{4} - \frac{\sqrt{3} x^2}{4}}{h} \right] \\ \left[.4 = \left[\frac{\sqrt{3} x}{2} \right], .5 = \left[\frac{5\sqrt{3}}{2} \right], .6 = \left[\frac{7\sqrt{3}}{2} \right] \right] \end{array} \right], \quad , \quad \left[\begin{array}{c} M \\ a \\ t \\ h \\ @ \\ M \\ U \\ T \end{array} \right]$$

$$Ans1 = (k = 2), \quad , \quad Ans2 = (k = 5), \quad , \quad Ans3 = \begin{bmatrix} a = -6 \\ b = -5 \end{bmatrix}, \quad , \quad Ans4 = \begin{bmatrix} a = 4 \\ b = 6 \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (1, 4) \\ .2 = (5, 28) \\ .3 = 6 \\ .4 = (2, 7) \\ .5 = 3 \\ .6 = 2 \end{bmatrix}, \quad , \quad Ans6 = \begin{bmatrix} .1 = [f(a) = 25] \\ .2 = [f(b) = 28.28, h = 0.2, RateOfChange = 16.400] \\ .3 = [f(c) = 26.62, h = 0.1, RateOfChange = 16.200] \\ .4 = [f(d) = 25.1602, h = 0.01, RateOfChange = 16.020] \\ .5 = [RateOfChange at the point a = 16] \end{bmatrix}$$

$$Ans7 = \begin{bmatrix} .1 = [f(r) = 2 \pi r] \\ .2 = [f(r + h) = 2 \pi (r + h)] \\ .3 = \left[\frac{2 \pi (r + h) - 2 \pi r}{h} \right] \\ [.4 = [2 \pi], .5 = [2 \pi], .6 = [2 \pi]] \end{bmatrix}, \quad , \quad Ans8 = \begin{bmatrix} .1 = [f(r) = \pi r^2] \\ .2 = [f(r + h) = \pi (r + h)^2] \\ .3 = \left[\frac{\pi (r + h)^2 - \pi r^2}{h} \right] \\ [.4 = [2 \pi r], .5 = [12 \pi], .6 = [8 \pi]] \end{bmatrix}$$

$$Ans9 = \begin{bmatrix} .1 = \left[f(x) = \frac{\sqrt{3} x^2}{4} \right] \\ .2 = \left[f(x + h) = \frac{\sqrt{3} (x + h)^2}{4} \right] \\ .3 = \left[\frac{\frac{\sqrt{3} (x + h)^2}{4} - \frac{\sqrt{3} x^2}{4}}{h} \right] \\ \left[.4 = \left[\frac{\sqrt{3} x}{2} \right], .5 = [4 \sqrt{3}], .6 = [\sqrt{3}] \right] \end{bmatrix}, \quad , \quad \begin{bmatrix} M \\ a \\ t \\ h \\ @ \\ M \\ U \\ T \end{bmatrix}$$

$$Ans9 = \left[\begin{array}{l} .1 = \left[f(x) = \frac{\sqrt{3} x^2}{4} \right] \\ .2 = \left[f(x+h) = \frac{\sqrt{3} (x+h)^2}{4} \right] \\ .3 = \left[\frac{\frac{\sqrt{3} (x+h)^2}{4} - \frac{\sqrt{3} x^2}{4}}{h} \right] \\ .4 = \left[\frac{\sqrt{3} x}{2} \right], .5 = [\sqrt{3}], .6 = \left[\frac{3\sqrt{3}}{2} \right] \end{array} \right], \quad , \quad \left[\begin{array}{l} M \\ a \\ t \\ h \\ @ \\ M \\ U \\ T \end{array} \right]$$

$$Ans9 = \left[\begin{array}{l} .1 = \left[f(x) = \frac{\sqrt{3} x^2}{4} \right] \\ .2 = \left[f(x+h) = \frac{\sqrt{3} (x+h)^2}{4} \right] \\ .3 = \left[\frac{\frac{\sqrt{3} (x+h)^2}{4} - \frac{\sqrt{3} x^2}{4}}{h} \right] \\ .4 = \left[\frac{\sqrt{3} x}{2} \right], .5 = \left[\frac{3\sqrt{3}}{2} \right], .6 = [\sqrt{3}] \end{array} \right], \quad \left[\begin{array}{c} M \\ a \\ t \\ h \\ @ \\ M \\ U \\ T \end{array} \right]$$

$$Ans9 = \left[\begin{array}{l} .1 = \left[f(x) = \frac{\sqrt{3} x^2}{4} \right] \\ .2 = \left[f(x+h) = \frac{\sqrt{3} (x+h)^2}{4} \right] \\ .3 = \left[\frac{\frac{\sqrt{3} (x+h)^2}{4} - \frac{\sqrt{3} x^2}{4}}{h} \right] \\ .4 = \left[\frac{\sqrt{3} x}{2} \right], .5 = \left[\frac{3\sqrt{3}}{2} \right], .6 = [3\sqrt{3}] \end{array} \right], \quad \left[\begin{array}{c} M \\ a \\ t \\ h \\ @ \\ M \\ U \\ T \end{array} \right]$$

$$Ans9 = \left[\begin{array}{l} .1 = \left[f(x) = \frac{\sqrt{3} x^2}{4} \right] \\ .2 = \left[f(x+h) = \frac{\sqrt{3} (x+h)^2}{4} \right] \\ .3 = \left[\frac{\frac{\sqrt{3} (x+h)^2}{4} - \frac{\sqrt{3} x^2}{4}}{h} \right] \\ .4 = \left[\frac{\sqrt{3} x}{2} \right], .5 = [2\sqrt{3}], .6 = [3\sqrt{3}] \end{array} \right], \quad , \quad \left[\begin{array}{c} M \\ a \\ t \\ h \\ @ \\ M \\ U \\ T \end{array} \right]$$

$$\begin{aligned}
& Ans1 = (k = 25), \quad , \quad Ans2 = (k = 2), \quad , \quad Ans3 = \begin{bmatrix} a = -22 \\ b = -7 \end{bmatrix}, \quad , \quad Ans4 = \begin{bmatrix} a = 8 \\ b = 6 \end{bmatrix} \\
& Ans5 = \begin{bmatrix} .1 = (4, 4) \\ .2 = (9, 39) \\ .3 = 7 \\ .4 = (5, 7) \\ .5 = 3 \\ .6 = 2 \end{bmatrix}, \quad , \quad Ans6 = \begin{bmatrix} .1 = [f(a) = 23] \\ .2 = [f(b) = 28.88, h = 0.2, RateOfChange = 29.400] \\ .3 = [f(c) = 25.87, h = 0.1, RateOfChange = 28.700] \\ .4 = [f(d) = 23.2807, h = 0.01, RateOfChange = 28.070] \\ .5 = [RateOfChange \text{ at the point } a = 28] \end{bmatrix} \\
& Ans7 = \begin{bmatrix} .1 = [f(r) = 2 \pi r] \\ .2 = [f(r + h) = 2 \pi (r + h)] \\ .3 = \left[\frac{2 \pi (r + h) - 2 \pi r}{h} \right] \\ [.4 = [2 \pi], .5 = [2 \pi], .6 = [2 \pi]] \end{bmatrix}, \quad , \quad Ans8 = \begin{bmatrix} .1 = [f(r) = \pi r^2] \\ .2 = [f(r + h) = \pi (r + h)^2] \\ .3 = \left[\frac{\pi (r + h)^2 - \pi r^2}{h} \right] \\ [.4 = [2 \pi r], .5 = [14 \pi], .6 = [12 \pi]] \end{bmatrix} \\
& Ans9 = \begin{bmatrix} .1 = \left[f(x) = \frac{\sqrt{3} x^2}{4} \right] \\ .2 = \left[f(x + h) = \frac{\sqrt{3} (x + h)^2}{4} \right] \\ .3 = \left[\frac{\frac{\sqrt{3} (x + h)^2}{4} - \frac{\sqrt{3} x^2}{4}}{h} \right] \\ \left[.4 = \left[\frac{\sqrt{3} x}{2} \right], .5 = \left[\frac{5 \sqrt{3}}{2} \right], .6 = [2 \sqrt{3}] \right] \end{bmatrix}, \quad , \quad \begin{bmatrix} M \\ a \\ t \\ h \\ @ \\ M \\ U \\ T \end{bmatrix}
\end{aligned}$$

$$Ans1 = (k = 36), \quad , \quad Ans2 = (k = 6), \quad , \quad Ans3 = \begin{bmatrix} a = 1 \\ b = -4 \end{bmatrix}, \quad , \quad Ans4 = \begin{bmatrix} a = 2 \\ b = 6 \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (5, 9) \\ .2 = (7, 21) \\ .3 = 6 \\ .4 = (6, 14) \\ .5 = 5 \\ .6 = 4 \end{bmatrix}, \quad , \quad Ans6 = \begin{bmatrix} .1 = [f(a) = 57] \\ .2 = [f(b) = 65.68, h = 0.2, RateOfChange = 43.400] \\ .3 = [f(c) = 61.27, h = 0.1, RateOfChange = 42.700] \\ .4 = [f(d) = 57.4207, h = 0.01, RateOfChange = 42.070] \\ .5 = [RateOfChange \text{ at the point } a = 42] \end{bmatrix}$$

$$Ans7 = \begin{bmatrix} .1 = [f(r) = 2 \pi r] \\ .2 = [f(r + h) = 2 \pi (r + h)] \\ .3 = \left[\frac{2 \pi (r + h) - 2 \pi r}{h} \right] \\ [.4 = [2 \pi], .5 = [2 \pi], .6 = [2 \pi]] \end{bmatrix}, \quad , \quad Ans8 = \begin{bmatrix} .1 = [f(r) = \pi r^2] \\ .2 = [f(r + h) = \pi (r + h)^2] \\ .3 = \left[\frac{\pi (r + h)^2 - \pi r^2}{h} \right] \\ [.4 = [2 \pi r], .5 = [8 \pi], .6 = [14 \pi]] \end{bmatrix}$$

$$Ans9 = \begin{bmatrix} .1 = \left[f(x) = \frac{\sqrt{3} x^2}{4} \right] \\ .2 = \left[f(x + h) = \frac{\sqrt{3} (x + h)^2}{4} \right] \\ .3 = \left[\frac{\frac{\sqrt{3} (x + h)^2}{4} - \frac{\sqrt{3} x^2}{4}}{h} \right] \\ \left[.4 = \left[\frac{\sqrt{3} x}{2} \right], .5 = \left[\frac{7 \sqrt{3}}{2} \right], .6 = [\sqrt{3}] \right] \end{bmatrix}, \quad , \quad \begin{bmatrix} M \\ a \\ t \\ h \\ @ \\ M \\ U \\ T \end{bmatrix}$$

$$Ans9 = \left[\begin{array}{l} .1 = \left[f(x) = \frac{\sqrt{3} x^2}{4} \right] \\ .2 = \left[f(x+h) = \frac{\sqrt{3} (x+h)^2}{4} \right] \\ .3 = \left[\frac{\frac{\sqrt{3} (x+h)^2}{4} - \frac{\sqrt{3} x^2}{4}}{h} \right] \\ .4 = \left[\frac{\sqrt{3} x}{2} \right], .5 = [3 \sqrt{3}], .6 = [2 \sqrt{3}] \end{array} \right], \quad , \quad \left[\begin{array}{c} M \\ a \\ t \\ h \\ @ \\ M \\ U \\ T \end{array} \right]$$

$$\begin{aligned}
 &Ans1 = (k = 11), \quad , \quad Ans2 = (k = 2), \quad , \quad Ans3 = \begin{bmatrix} a = 3 \\ b = -63 \end{bmatrix}, \quad , \quad Ans4 = \begin{bmatrix} a = 8 \\ b = 2 \end{bmatrix} \\
 &Ans5 = \begin{bmatrix} .1 = (2, 8) \\ .2 = (5, 23) \\ .3 = 5 \\ .4 = (3, 11) \\ .5 = 3 \\ .6 = 2 \end{bmatrix}, \quad , \quad Ans6 = \begin{bmatrix} .1 = [f(a) = 31] \\ .2 = [f(b) = 35.96, h = 0.2, RateOfChange = 24.800] \\ .3 = [f(c) = 33.44, h = 0.1, RateOfChange = 24.400] \\ .4 = [f(d) = 31.2404, h = 0.01, RateOfChange = 24.040] \\ .5 = [RateOfChange \text{ at the point } a = 24] \end{bmatrix} \\
 &Ans7 = \begin{bmatrix} .1 = [f(r) = 2 \pi r] \\ .2 = [f(r + h) = 2 \pi (r + h)] \\ .3 = \left[\frac{2 \pi (r + h) - 2 \pi r}{h} \right] \\ [.4 = [2 \pi], .5 = [2 \pi], .6 = [2 \pi]] \end{bmatrix}, \quad , \quad Ans8 = \begin{bmatrix} .1 = [f(r) = \pi r^2] \\ .2 = [f(r + h) = \pi (r + h)^2] \\ .3 = \left[\frac{\pi (r + h)^2 - \pi r^2}{h} \right] \\ [.4 = [2 \pi r], .5 = [4 \pi], .6 = [8 \pi]] \end{bmatrix} \\
 &Ans9 = \begin{bmatrix} .1 = \left[f(x) = \frac{\sqrt{3} x^2}{4} \right] \\ .2 = \left[f(x + h) = \frac{\sqrt{3} (x + h)^2}{4} \right] \\ .3 = \left[\frac{\frac{\sqrt{3} (x + h)^2}{4} - \frac{\sqrt{3} x^2}{4}}{h} \right] \\ \left[.4 = \left[\frac{\sqrt{3} x}{2} \right], .5 = [2 \sqrt{3}], .6 = \left[\frac{7 \sqrt{3}}{2} \right] \right] \end{bmatrix}, \quad , \quad \begin{bmatrix} M \\ a \\ t \\ h \\ @ \\ M \\ U \\ T \end{bmatrix}
 \end{aligned}$$

$$Ans9 = \left[\begin{array}{l} .1 = \left[f(x) = \frac{\sqrt{3} x^2}{4} \right] \\ .2 = \left[f(x+h) = \frac{\sqrt{3} (x+h)^2}{4} \right] \\ .3 = \left[\frac{\frac{\sqrt{3} (x+h)^2}{4} - \frac{\sqrt{3} x^2}{4}}{h} \right] \\ .4 = \left[\frac{\sqrt{3} x}{2} \right], .5 = [3 \sqrt{3}], .6 = [2 \sqrt{3}] \end{array} \right], \quad \left[\begin{array}{c} M \\ a \\ t \\ h \\ @ \\ M \\ U \\ T \end{array} \right]$$

$$Ans1 = (k = 3), \quad , \quad Ans2 = (k = 5), \quad , \quad Ans3 = \begin{bmatrix} a = -1 \\ b = 17 \end{bmatrix}, \quad , \quad Ans4 = \begin{bmatrix} a = 6 \\ b = 3 \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (4, 9) \\ .2 = (8, 41) \\ .3 = 8 \\ .4 = (5, 14) \\ .5 = 5 \\ .6 = 4 \end{bmatrix}, \quad , \quad Ans6 = \begin{bmatrix} .1 = [f(a) = 33] \\ .2 = [f(b) = 37.96, h = 0.2, RateOfChange = 24.800] \\ .3 = [f(c) = 35.44, h = 0.1, RateOfChange = 24.400] \\ .4 = [f(d) = 33.2404, h = 0.01, RateOfChange = 24.040] \\ .5 = [RateOfChange \text{ at the point } a = 24] \end{bmatrix}$$

$$Ans7 = \begin{bmatrix} .1 = [f(r) = 2 \pi r] \\ .2 = [f(r + h) = 2 \pi (r + h)] \\ .3 = \left[\frac{2 \pi (r + h) - 2 \pi r}{h} \right] \\ [.4 = [2 \pi], .5 = [2 \pi], .6 = [2 \pi]] \end{bmatrix}, \quad , \quad Ans8 = \begin{bmatrix} .1 = [f(r) = \pi r^2] \\ .2 = [f(r + h) = \pi (r + h)^2] \\ .3 = \left[\frac{\pi (r + h)^2 - \pi r^2}{h} \right] \\ [.4 = [2 \pi r], .5 = [8 \pi], .6 = [10 \pi]] \end{bmatrix}$$

$$Ans9 = \begin{bmatrix} .1 = \left[f(x) = \frac{\sqrt{3} x^2}{4} \right] \\ .2 = \left[f(x + h) = \frac{\sqrt{3} (x + h)^2}{4} \right] \\ .3 = \left[\frac{\frac{\sqrt{3} (x + h)^2}{4} - \frac{\sqrt{3} x^2}{4}}{h} \right] \\ \left[.4 = \left[\frac{\sqrt{3} x}{2} \right], .5 = \left[\frac{7 \sqrt{3}}{2} \right], .6 = \left[\frac{5 \sqrt{3}}{2} \right] \right] \end{bmatrix}, \quad , \quad \begin{bmatrix} M \\ a \\ t \\ h \\ @ \\ M \\ U \\ T \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (3, 6) \\ .2 = (7, 30) \\ .3 = 6 \\ .4 = (4, 9) \\ .5 = 3 \\ .6 = 2 \end{bmatrix}, \quad Ans6 = \begin{bmatrix} .1 = [f(a) = 27] \\ .2 = [f(b) = 30.28, h = 0.2, RateOfChange = 16.400] \\ .3 = [f(c) = 28.62, h = 0.1, RateOfChange = 16.200] \\ .4 = [f(d) = 27.1602, h = 0.01, RateOfChange = 16.020] \\ .5 = [RateOfChange \text{ at the point } a = 16] \end{bmatrix}$$

$$Ans7 = \begin{bmatrix} .1 = [f(r) = 2 \pi r] \\ .2 = [f(r+h) = 2 \pi (r+h)] \\ .3 = \left[\frac{2 \pi (r+h) - 2 \pi r}{h} \right] \\ [.4 = [2 \pi], .5 = [2 \pi], .6 = [2 \pi]] \end{bmatrix}, \quad Ans8 = \begin{bmatrix} .1 = [f(r) = \pi r^2] \\ .2 = [f(r+h) = \pi (r+h)^2] \\ .3 = \left[\frac{\pi (r+h)^2 - \pi r^2}{h} \right] \\ [.4 = [2 \pi r], .5 = [10 \pi], .6 = [16 \pi]] \end{bmatrix}$$

$$Ans9 = \left[\begin{array}{l} .1 = \left[f(x) = \frac{\sqrt{3} x^2}{4} \right] \\ .2 = \left[f(x+h) = \frac{\sqrt{3} (x+h)^2}{4} \right] \\ .3 = \left[\frac{\frac{\sqrt{3} (x+h)^2}{4} - \frac{\sqrt{3} x^2}{4}}{h} \right] \\ .4 = \left[\frac{\sqrt{3} x}{2} \right], .5 = \left[\frac{5\sqrt{3}}{2} \right], .6 = \left[\frac{3\sqrt{3}}{2} \right] \end{array} \right], \quad \left[\begin{array}{c} M \\ a \\ t \\ h \\ @ \\ M \\ U \\ T \end{array} \right]$$

$$Ans1 = (k = 6), \quad , \quad Ans2 = (k = 6), \quad , \quad Ans3 = \begin{bmatrix} a = 42 \\ b = 3 \end{bmatrix}, \quad , \quad Ans4 = \begin{bmatrix} a = 7 \\ b = 5 \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (1, 5) \\ .2 = (5, 29) \\ .3 = 6 \\ .4 = (2, 8) \\ .5 = 3 \\ .6 = 2 \end{bmatrix}, \quad , \quad Ans6 = \begin{bmatrix} .1 = [f(a) = 69] \\ .2 = [f(b) = 78.92, h = 0.2, RateOfChange = 49.600] \\ .3 = [f(c) = 73.88, h = 0.1, RateOfChange = 48.800] \\ .4 = [f(d) = 69.4808, h = 0.01, RateOfChange = 48.080] \\ .5 = [RateOfChange at the point a = 48] \end{bmatrix}$$

$$Ans7 = \begin{bmatrix} .1 = [f(r) = 2 \pi r] \\ .2 = [f(r + h) = 2 \pi (r + h)] \\ .3 = \left[\frac{2 \pi (r + h) - 2 \pi r}{h} \right] \\ [.4 = [2 \pi], .5 = [2 \pi], .6 = [2 \pi]] \end{bmatrix}, \quad , \quad Ans8 = \begin{bmatrix} .1 = [f(r) = \pi r^2] \\ .2 = [f(r + h) = \pi (r + h)^2] \\ .3 = \left[\frac{\pi (r + h)^2 - \pi r^2}{h} \right] \\ [.4 = [2 \pi r], .5 = [10 \pi], .6 = [12 \pi]] \end{bmatrix}$$

$$Ans9 = \begin{bmatrix} .1 = \left[f(x) = \frac{\sqrt{3} x^2}{4} \right] \\ .2 = \left[f(x + h) = \frac{\sqrt{3} (x + h)^2}{4} \right] \\ .3 = \left[\frac{\frac{\sqrt{3} (x + h)^2}{4} - \frac{\sqrt{3} x^2}{4}}{h} \right] \\ \left[.4 = \left[\frac{\sqrt{3} x}{2} \right], .5 = \left[\frac{7 \sqrt{3}}{2} \right], .6 = \left[\frac{5 \sqrt{3}}{2} \right] \right] \end{bmatrix}, \quad , \quad \begin{bmatrix} M \\ a \\ t \\ h \\ @ \\ M \\ U \\ T \end{bmatrix}$$

[illegible]