Diff01 Answers for No.8765

$$Ans1 = (k = 8), \quad , \; Ans2 = (k = 4), \quad , \; Ans3 = \begin{bmatrix} a = 5 \\ b = -2 \end{bmatrix}, \quad , \; Ans4 = \begin{bmatrix} a = 5 \\ b = 3 \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (2, 9) \\ .2 = (6, 41) \\ .3 = 8 \\ .4 = (3, 14) \\ .5 = 5 \\ .6 = 4 \end{bmatrix}, \quad , \; Ans6 = \begin{bmatrix} .1 = [\mathrm{f}(a) = 133] \\ .2 = [\mathrm{f}(b) = 146.12, h = 0.2, RateOfChange = 65.600] \\ .3 = [\mathrm{f}(c) = 139.48, h = 0.1, RateOfChange = 64.800] \\ .4 = [\mathrm{f}(d) = 133.6408, h = 0.01, RateOfChange = 64.080] \\ .5 = [RateOfChange\ at\ the\ point\ a = 64] \end{bmatrix}$$

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

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

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Diff01 Answers for No.8767

$$Ans1 = (k = -7), \quad , \quad Ans2 = (k = 6), \quad , \quad Ans3 = \begin{bmatrix} a = 3 \\ b = 61 \end{bmatrix}, \quad , \quad Ans4 = \begin{bmatrix} a = 5 \\ b = 7 \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (4, 8) \\ .2 = (8, 40) \\ .3 = 8 \\ .4 = (5, 13) \\ .5 = 5 \\ .6 = 4 \end{bmatrix}, \quad , \quad Ans6 = \begin{bmatrix} .1 = [f(a) = 39] \\ .2 = [f(b) = 45.72, h = 0.2, RateOfChange = 33.600] \\ .3 = [f(c) = 42.28, h = 0.1, RateOfChange = 32.800] \\ .4 = [f(d) = 39.3208, h = 0.01, RateOfChange = 32.080] \\ .5 = [RateOfChange\ at\ the\ point\ a = 32] \end{bmatrix}$$

$$Ans7 = \begin{bmatrix} .1 = [f(r) = 2\pi r] \\ .2 = [f(r+h) = 2\pi(r+h)] \\ .3 = \left[\dfrac{2\pi(r+h) - 2\pi r}{h}\right] \\ [.4 = [2\pi], .5 = [2\pi], .6 = [2\pi]] \end{bmatrix}, \quad , \quad Ans8 = \begin{bmatrix} .1 = [f(r) = \pi r^2] \\ .2 = [f(r+h) = \pi(r+h)^2] \\ .3 = \left[\dfrac{\pi(r+h)^2 - \pi r^2}{h}\right] \\ [.4 = [2\pi r], .5 = [12\pi], .6 = [14\pi]] \end{bmatrix}$$

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

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Diff01 Answers for No.8768

$$Ans1 = (k = 7), \quad , Ans2 = (k = 2), \quad , Ans3 = \begin{bmatrix} a = 5 \\ b = -3 \end{bmatrix}, \quad , Ans4 = \begin{bmatrix} a = 4 \\ b = 2 \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (2, 8) \\ .2 = (7, 43) \\ .3 = 7 \\ .4 = (3, 11) \\ .5 = 3 \\ .6 = 2 \end{bmatrix}, \quad , Ans6 = \begin{bmatrix} .1 = [f(a) = 51] \\ .2 = [f(b) = 57.20, h = 0.2, RateOfChange = 31.000] \\ .3 = [f(c) = 54.05, h = 0.1, RateOfChange = 30.500] \\ .4 = [f(d) = 51.3005, h = 0.01, RateOfChange = 30.050] \\ .5 = [RateOfChange\ at\ the\ point\ a = 30] \end{bmatrix}$$

$$Ans7 = \begin{bmatrix} .1 = [f(r) = 2\,\pi\,r] \\ .2 = [f(r+h) = 2\,\pi\,(r+h)] \\ .3 = \left[\dfrac{2\,\pi\,(r+h) - 2\,\pi\,r}{h}\right] \\ [.4 = [2\,\pi], .5 = [2\,\pi], .6 = [2\,\pi]] \end{bmatrix}, \quad , Ans8 = \begin{bmatrix} .1 = [f(r) = \pi\,r^2] \\ .2 = [f(r+h) = \pi\,(r+h)^2] \\ .3 = \left[\dfrac{\pi\,(r+h)^2 - \pi\,r^2}{h}\right] \\ [.4 = [2\,\pi\,r], .5 = [14\,\pi], .6 = [12\,\pi]] \end{bmatrix}$$

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

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Diff01 Answers for No.8779

$$Ans1 = (k = 4), \quad , \quad Ans2 = (k = 3), \quad , \quad Ans3 = \begin{bmatrix} a = 2 \\ b = -14 \end{bmatrix}, \quad , \quad Ans4 = \begin{bmatrix} a = 3 \\ b = 6 \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (3, 3) \\ .2 = (8, 38) \\ .3 = 7 \\ .4 = (4, 6) \\ .5 = 3 \\ .6 = 2 \end{bmatrix}, \quad , \quad Ans6 = \begin{bmatrix} .1 = [\mathrm{f}(a) = 25] \\ .2 = [\mathrm{f}(b) = 30.88, h = 0.2, RateOfChange = 29.400] \\ .3 = [\mathrm{f}(c) = 27.87, h = 0.1, RateOfChange = 28.700] \\ .4 = [\mathrm{f}(d) = 25.2807, h = 0.01, RateOfChange = 28.070] \\ .5 = [RateOfChange\ at\ the\ point\ a = 28] \end{bmatrix}$$

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

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

Diff01 Answers for No.9404

$$Ans1 = (k = 4), \quad , Ans2 = (k = 2), \quad , Ans3 = \begin{bmatrix} a = 2 \\ b = 17 \end{bmatrix}, \quad , Ans4 = \begin{bmatrix} a = 7 \\ b = 4 \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (2, 11) \\ .2 = (5, 32) \\ .3 = 7 \\ .4 = (3, 16) \\ .5 = 5 \\ .6 = 4 \end{bmatrix}, \quad , Ans6 = \begin{bmatrix} .1 = [\mathrm{f}(a) = 29] \\ .2 = [\mathrm{f}(b) = 33.96, h = 0.2, RateOfChange = 24.800] \\ .3 = [\mathrm{f}(c) = 31.44, h = 0.1, RateOfChange = 24.400] \\ .4 = [\mathrm{f}(d) = 29.2404, h = 0.01, RateOfChange = 24.040] \\ .5 = [RateOfChange\ at\ the\ point\ a = 24] \end{bmatrix}$$

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

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

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Diff01 Answers for No.9440

$$Ans1 = (k = 2), \quad , Ans2 = (k = 2), \quad , Ans3 = \begin{bmatrix} a = 6 \\ b = 1 \end{bmatrix}, \quad , Ans4 = \begin{bmatrix} a = 3 \\ b = 5 \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (1, 2) \\ .2 = (6, 37) \\ .3 = 7 \\ .4 = (2, 5) \\ .5 = 3 \\ .6 = 2 \end{bmatrix}, \quad , Ans6 = \begin{bmatrix} .1 = [\mathrm{f}(a) = 50] \\ .2 = [\mathrm{f}(b) = 54.92, h = 0.2, RateOfChange = 24.600] \\ .3 = [\mathrm{f}(c) = 52.43, h = 0.1, RateOfChange = 24.300] \\ .4 = [\mathrm{f}(d) = 50.2403, h = 0.01, RateOfChange = 24.030] \\ .5 = [RateOfChange\ at\ the\ point\ a = 24] \end{bmatrix}$$

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

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

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Diff01 Answers for No.9474

$$Ans1 = (k = 7), \quad , \quad Ans2 = (k = 4), \quad , \quad Ans3 = \begin{bmatrix} a = 2 \\ b = 1 \end{bmatrix}, \quad , \quad Ans4 = \begin{bmatrix} a = 2 \\ b = 4 \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (4, 3) \\ .2 = (7, 18) \\ .3 = 5 \\ .4 = (5, 6) \\ .5 = 3 \\ .6 = 2 \end{bmatrix}, \quad , \quad Ans6 = \begin{bmatrix} .1 = [\mathrm{f}(a) = 13] \\ .2 = [\mathrm{f}(b) = 17.20,\ h = 0.2,\ RateOfChange = 21.000] \\ .3 = [\mathrm{f}(c) = 15.05,\ h = 0.1,\ RateOfChange = 20.500] \\ .4 = [\mathrm{f}(d) = 13.2005,\ h = 0.01,\ RateOfChange = 20.050] \\ .5 = [RateOfChange\ at\ the\ point\ a = 20] \end{bmatrix}$$

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

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

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Diff01 Answers for No.9607

$$Ans1 = (k = 3), \quad , Ans2 = (k = 6), \quad , Ans3 = \begin{bmatrix} a = 2 \\ b = 1 \end{bmatrix}, \quad , Ans4 = \begin{bmatrix} a = 8 \\ b = 5 \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (4, 7) \\ .2 = (6, 19) \\ .3 = 6 \\ .4 = (5, 12) \\ .5 = 5 \\ .6 = 4 \end{bmatrix}, \quad , Ans6 = \begin{bmatrix} .1 = [f(a) = 133] \\ .2 = [f(b) = 146.12, h = 0.2, RateOfChange = 65.600] \\ .3 = [f(c) = 139.48, h = 0.1, RateOfChange = 64.800] \\ .4 = [f(d) = 133.6408, h = 0.01, RateOfChange = 64.080] \\ .5 = [RateOfChange\ at\ the\ point\ a = 64] \end{bmatrix}$$

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

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

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Diff01 Answers for No.9965

$$Ans1 = (k = 29), \quad , Ans2 = (k = 3), \quad , Ans3 = \begin{bmatrix} a = 23 \\ b = 1 \end{bmatrix}, \quad , Ans4 = \begin{bmatrix} a = 8 \\ b = 4 \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (3, 9) \\ .2 = (7, 41) \\ .3 = 8 \\ .4 = (4, 14) \\ .5 = 5 \\ .6 = 4 \end{bmatrix}, \quad , Ans6 = \begin{bmatrix} .1 = [\mathrm{f}(a) = 5] \\ .2 = [\mathrm{f}(b) = 7.52, h = 0.2, RateOfChange = 12.600] \\ .3 = [\mathrm{f}(c) = 6.23, h = 0.1, RateOfChange = 12.300] \\ .4 = [\mathrm{f}(d) = 5.1203, h = 0.01, RateOfChange = 12.030] \\ .5 = [RateOfChange\ at\ the\ point\ a = 12] \end{bmatrix}$$

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

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

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Diff01 Answers for No.10186

$$Ans1 = (k = 1), \quad , \; Ans2 = (k = 2), \quad , \; Ans3 = \begin{bmatrix} a = 57 \\ b = -5 \end{bmatrix}, \quad , \; Ans4 = \begin{bmatrix} a = 4 \\ b = 2 \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (4, 5) \\ .2 = (7, 26) \\ .3 = 7 \\ .4 = (5, 10) \\ .5 = 5 \\ .6 = 4 \end{bmatrix}, \quad , \; Ans6 = \begin{bmatrix} .1 = [\mathrm{f}(a) = 37] \\ .2 = [\mathrm{f}(b) = 43.72,\ h = 0.2,\ RateOfChange = 33.600] \\ .3 = [\mathrm{f}(c) = 40.28,\ h = 0.1,\ RateOfChange = 32.800] \\ .4 = [\mathrm{f}(d) = 37.3208,\ h = 0.01,\ RateOfChange = 32.080] \\ .5 = [RateOfChange\ at\ the\ point\ a = 32] \end{bmatrix}$$

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

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

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Diff01 Answers for No.10203

$$Ans1 = (k = 17), \quad , \quad Ans2 = (k = 3), \quad , \quad Ans3 = \begin{bmatrix} a = 2 \\ b = 6 \end{bmatrix}, \quad , \quad Ans4 = \begin{bmatrix} a = 7 \\ b = 5 \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (3, 3) \\ .2 = (7, 27) \\ .3 = 6 \\ .4 = (4, 6) \\ .5 = 3 \\ .6 = 2 \end{bmatrix}, \quad , \quad Ans6 = \begin{bmatrix} .1 = [\mathrm{f}(a) = 59] \\ .2 = [\mathrm{f}(b) = 66.44, h = 0.2, RateOfChange = 37.200] \\ .3 = [\mathrm{f}(c) = 62.66, h = 0.1, RateOfChange = 36.600] \\ .4 = [\mathrm{f}(d) = 59.3606, h = 0.01, RateOfChange = 36.060] \\ .5 = [RateOfChange\ at\ the\ point\ a = 36] \end{bmatrix}$$

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

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

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Diff01 Answers for No.10215

$$Ans1 = (k = 4), \quad , Ans2 = (k = 6), \quad , Ans3 = \begin{bmatrix} a = -17 \\ b = 1 \end{bmatrix}, \quad , Ans4 = \begin{bmatrix} a = 2 \\ b = 4 \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (3, 7) \\ .2 = (6, 28) \\ .3 = 7 \\ .4 = (4, 12) \\ .5 = 5 \\ .6 = 4 \end{bmatrix}, \quad , Ans6 = \begin{bmatrix} .1 = [\mathrm{f}(a) = 32] \\ .2 = [\mathrm{f}(b) = 37.88, h = 0.2, RateOfChange = 29.400] \\ .3 = [\mathrm{f}(c) = 34.87, h = 0.1, RateOfChange = 28.700] \\ .4 = [\mathrm{f}(d) = 32.2807, h = 0.01, RateOfChange = 28.070] \\ .5 = [RateOfChange\ at\ the\ point\ a = 28] \end{bmatrix}$$

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

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

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Diff01 Answers for No.10889

$$Ans1 = (k = 16), \quad , Ans2 = (k = 5), \quad , Ans3 = \begin{bmatrix} a = -4 \\ b = 3 \end{bmatrix}, \quad , Ans4 = \begin{bmatrix} a = 2 \\ b = 6 \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (1, 6) \\ .2 = (5, 30) \\ .3 = 6 \\ .4 = (2, 9) \\ .5 = 3 \\ .6 = 2 \end{bmatrix}, \quad , Ans6 = \begin{bmatrix} .1 = [\mathrm{f}(a) = 43] \\ .2 = [\mathrm{f}(b) = 47.92, h = 0.2, RateOfChange = 24.600] \\ .3 = [\mathrm{f}(c) = 45.43, h = 0.1, RateOfChange = 24.300] \\ .4 = [\mathrm{f}(d) = 43.2403, h = 0.01, RateOfChange = 24.030] \\ .5 = [RateOfChange\ at\ the\ point\ a = 24] \end{bmatrix}$$

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

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

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Diff01 Answers for No.10981

$$Ans1 = (k = 0), \quad , \quad Ans2 = (k = 3), \quad , \quad Ans3 = \begin{bmatrix} a = -16 \\ b = 3 \end{bmatrix}, \quad , \quad Ans4 = \begin{bmatrix} a = 2 \\ b = 6 \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (4, 7) \\ .2 = (9, 42) \\ .3 = 7 \\ .4 = (5, 10) \\ .5 = 3 \\ .6 = 2 \end{bmatrix}, \quad , \quad Ans6 = \begin{bmatrix} .1 = [\mathrm{f}(a) = 65] \\ .2 = [\mathrm{f}(b) = 73.68, h = 0.2, RateOfChange = 43.400] \\ .3 = [\mathrm{f}(c) = 69.27, h = 0.1, RateOfChange = 42.700] \\ .4 = [\mathrm{f}(d) = 65.4207, h = 0.01, RateOfChange = 42.070] \\ .5 = [RateOfChange\ at\ the\ point\ a = 42] \end{bmatrix}$$

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

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

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Diff01 Answers for No.10996

$$Ans1 = (k = 4), \quad , \quad Ans2 = (k = 2), \quad , \quad Ans3 = \begin{bmatrix} a = 1 \\ b = 3 \end{bmatrix}, \quad , \quad Ans4 = \begin{bmatrix} a = 8 \\ b = 2 \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (2, 2) \\ .2 = (5, 17) \\ .3 = 5 \\ .4 = (3, 5) \\ .5 = 3 \\ .6 = 2 \end{bmatrix}, \quad , \quad Ans6 = \begin{bmatrix} .1 = [\mathrm{f}(a) = 24] \\ .2 = [\mathrm{f}(b) = 29.88, h = 0.2, RateOfChange = 29.400] \\ .3 = [\mathrm{f}(c) = 26.87, h = 0.1, RateOfChange = 28.700] \\ .4 = [\mathrm{f}(d) = 24.2807, h = 0.01, RateOfChange = 28.070] \\ .5 = [RateOfChange\ at\ the\ point\ a = 28] \end{bmatrix}$$

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

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

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Diff01 Answers for No.11386

$$Ans1 = (k = 7), \quad , \quad Ans2 = (k = 5), \quad , \quad Ans3 = \begin{bmatrix} a = -21 \\ b = 1 \end{bmatrix}, \quad , \quad Ans4 = \begin{bmatrix} a = 5 \\ b = 7 \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (2, 7) \\ .2 = (5, 28) \\ .3 = 7 \\ .4 = (3, 12) \\ .5 = 5 \\ .6 = 4 \end{bmatrix}, \quad , \quad Ans6 = \begin{bmatrix} .1 = [\mathrm{f}(a) = 33] \\ .2 = [\mathrm{f}(b) = 38.88, h = 0.2, RateOfChange = 29.400] \\ .3 = [\mathrm{f}(c) = 35.87, h = 0.1, RateOfChange = 28.700] \\ .4 = [\mathrm{f}(d) = 33.2807, h = 0.01, RateOfChange = 28.070] \\ .5 = [RateOfChange\ at\ the\ point\ a = 28] \end{bmatrix}$$

$$Ans7 = \begin{bmatrix} .1 = [\mathrm{f}(r) = 2\,\pi\,r] \\ .2 = [\mathrm{f}(r+h) = 2\,\pi\,(r+h)] \\ .3 = \left[\frac{2\,\pi\,(r+h) - 2\,\pi\,r}{h}\right] \\ [.4 = [2\,\pi], .5 = [2\,\pi], .6 = [2\,\pi]] \end{bmatrix}, \quad , \quad Ans8 = \begin{bmatrix} .1 = [\mathrm{f}(r) = \pi\,r^2] \\ .2 = [\mathrm{f}(r+h) = \pi\,(r+h)^2] \\ .3 = \left[\frac{\pi\,(r+h)^2 - \pi\,r^2}{h}\right] \\ [.4 = [2\,\pi\,r], .5 = [14\,\pi], .6 = [16\,\pi]] \end{bmatrix}$$

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

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Diff01 Answers for No.11394

$$Ans1 = (k = 2), \quad , Ans2 = (k = 3), \quad , Ans3 = \begin{bmatrix} a = 1 \\ b = -4 \end{bmatrix}, \quad , Ans4 = \begin{bmatrix} a = 7 \\ b = 2 \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (3, 8) \\ .2 = (5, 20) \\ .3 = 6 \\ .4 = (4, 13) \\ .5 = 5 \\ .6 = 4 \end{bmatrix}, \quad , Ans6 = \begin{bmatrix} .1 = [\mathrm{f}(a) = 9] \\ .2 = [\mathrm{f}(b) = 12.36, h = 0.2, RateOfChange = 16.800] \\ .3 = [\mathrm{f}(c) = 10.64, h = 0.1, RateOfChange = 16.400] \\ .4 = [\mathrm{f}(d) = 9.1604, h = 0.01, RateOfChange = 16.040] \\ .5 = [RateOfChange\ at\ the\ point\ a = 16] \end{bmatrix}$$

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

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

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Diff01 Answers for No.11397

$$Ans1 = (k = -4), \quad , Ans2 = (k = 6), \quad , Ans3 = \begin{bmatrix} a = -5 \\ b = 3 \end{bmatrix}, \quad , Ans4 = \begin{bmatrix} a = 4 \\ b = 6 \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (2, 6) \\ .2 = (7, 41) \\ .3 = 7 \\ .4 = (3, 9) \\ .5 = 3 \\ .6 = 2 \end{bmatrix}, \quad , Ans6 = \begin{bmatrix} .1 = [\mathrm{f}(a) = 31] \\ .2 = [\mathrm{f}(b) = 35.96, h = 0.2, RateOfChange = 24.800] \\ .3 = [\mathrm{f}(c) = 33.44, h = 0.1, RateOfChange = 24.400] \\ .4 = [\mathrm{f}(d) = 31.2404, h = 0.01, RateOfChange = 24.040] \\ .5 = [RateOfChange\ at\ the\ point\ a = 24] \end{bmatrix}$$

$$Ans7 = \begin{bmatrix} .1 = [\mathrm{f}(r) = 2\pi r] \\ .2 = [\mathrm{f}(r+h) = 2\pi(r+h)] \\ .3 = \left[\frac{2\pi(r+h) - 2\pi r}{h}\right] \\ [.4 = [2\pi], .5 = [2\pi], .6 = [2\pi]] \end{bmatrix}, \quad , Ans8 = \begin{bmatrix} .1 = [\mathrm{f}(r) = \pi r^2] \\ .2 = [\mathrm{f}(r+h) = \pi(r+h)^2] \\ .3 = \left[\frac{\pi(r+h)^2 - \pi r^2}{h}\right] \\ [.4 = [2\pi r], .5 = [16\pi], .6 = [8\pi]] \end{bmatrix}$$

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

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Diff01 Answers for No.11456

$$Ans1 = (k = 6), \quad , \quad Ans2 = (k = 2), \quad , \quad Ans3 = \begin{bmatrix} a = 1 \\ b = 23 \end{bmatrix}, \quad , \quad Ans4 = \begin{bmatrix} a = 5 \\ b = 2 \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (3, 3) \\ .2 = (8, 38) \\ .3 = 7 \\ .4 = (4, 6) \\ .5 = 3 \\ .6 = 2 \end{bmatrix}, \quad , \quad Ans6 = \begin{bmatrix} .1 = [\mathrm{f}(a) = 68] \\ .2 = [\mathrm{f}(b) = 76.68,\ h = 0.2,\ RateOfChange = 43.400] \\ .3 = [\mathrm{f}(c) = 72.27,\ h = 0.1,\ RateOfChange = 42.700] \\ .4 = [\mathrm{f}(d) = 68.4207,\ h = 0.01,\ RateOfChange = 42.070] \\ .5 = [RateOfChange\ at\ the\ point\ a = 42] \end{bmatrix}$$

$$Ans7 = \begin{bmatrix} .1 = [\mathrm{f}(r) = 2\,\pi\,r] \\ .2 = [\mathrm{f}(r+h) = 2\,\pi\,(r+h)] \\ .3 = \left[\dfrac{2\,\pi\,(r+h) - 2\,\pi\,r}{h}\right] \\ [.4 = [2\,\pi], .5 = [2\,\pi], .6 = [2\,\pi]] \end{bmatrix}, \quad , \quad Ans8 = \begin{bmatrix} .1 = [\mathrm{f}(r) = \pi\,r^2] \\ .2 = [\mathrm{f}(r+h) = \pi\,(r+h)^2] \\ .3 = \left[\dfrac{\pi\,(r+h)^2 - \pi\,r^2}{h}\right] \\ [.4 = [2\,\pi\,r], .5 = [14\,\pi], .6 = [16\,\pi]] \end{bmatrix}$$

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

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Diff01 Answers for No.11496

$$Ans1 = (k = 8), \quad , \quad Ans2 = (k = 6), \quad , \quad Ans3 = \begin{bmatrix} a = -2 \\ b = 59 \end{bmatrix}, \quad , \quad Ans4 = \begin{bmatrix} a = 6 \\ b = 4 \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (2, 10) \\ .2 = (6, 42) \\ .3 = 8 \\ .4 = (3, 15) \\ .5 = 5 \\ .6 = 4 \end{bmatrix}, \quad , \quad Ans6 = \begin{bmatrix} .1 = [f(a) = 43] \\ .2 = [f(b) = 49.20,\ h = 0.2,\ RateOfChange = 31.000] \\ .3 = [f(c) = 46.05,\ h = 0.1,\ RateOfChange = 30.500] \\ .4 = [f(d) = 43.3005,\ h = 0.01,\ RateOfChange = 30.050] \\ .5 = [RateOfChange\ at\ the\ point\ a = 30] \end{bmatrix}$$

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

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

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Diff01 Answers for No.11509

$$Ans1 = (k = 4), \quad , \quad Ans2 = (k = 4), \quad , \quad Ans3 = \begin{bmatrix} a = 2 \\ b = 18 \end{bmatrix}, \quad , \quad Ans4 = \begin{bmatrix} a = 8 \\ b = 3 \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (4, 9) \\ .2 = (7, 30) \\ .3 = 7 \\ .4 = (5, 14) \\ .5 = 5 \\ .6 = 4 \end{bmatrix}, \quad , \quad Ans6 = \begin{bmatrix} .1 = [\mathrm{f}(a) = 65] \\ .2 = [\mathrm{f}(b) = 73.68,\ h = 0.2,\ RateOfChange = 43.400] \\ .3 = [\mathrm{f}(c) = 69.27,\ h = 0.1,\ RateOfChange = 42.700] \\ .4 = [\mathrm{f}(d) = 65.4207,\ h = 0.01,\ RateOfChange = 42.070] \\ .5 = [RateOfChange\ at\ the\ point\ a = 42] \end{bmatrix}$$

$$Ans7 = \begin{bmatrix} .1 = [\mathrm{f}(r) = 2\,\pi\,r] \\ .2 = [\mathrm{f}(r+h) = 2\,\pi\,(r+h)] \\ .3 = \left[\dfrac{2\,\pi\,(r+h) - 2\,\pi\,r}{h}\right] \\ [.4 = [2\,\pi], .5 = [2\,\pi], .6 = [2\,\pi]] \end{bmatrix}, \quad , \quad Ans8 = \begin{bmatrix} .1 = [\mathrm{f}(r) = \pi\,r^2] \\ .2 = [\mathrm{f}(r+h) = \pi\,(r+h)^2] \\ .3 = \left[\dfrac{\pi\,(r+h)^2 - \pi\,r^2}{h}\right] \\ [.4 = [2\,\pi\,r], .5 = [12\,\pi], .6 = [16\,\pi]] \end{bmatrix}$$

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

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Diff01 Answers for No.11539

$$Ans1 = (k = 2), \quad , Ans2 = (k = 2), \quad , Ans3 = \begin{bmatrix} a = -43 \\ b = 2 \end{bmatrix}, \quad , Ans4 = \begin{bmatrix} a = 3 \\ b = 8 \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (4, 2) \\ .2 = (8, 26) \\ .3 = 6 \\ .4 = (5, 5) \\ .5 = 3 \\ .6 = 2 \end{bmatrix}, \quad , Ans6 = \begin{bmatrix} .1 = [f(a) = 118] \\ .2 = [f(b) = 129.48, h = 0.2, RateOfChange = 57.400] \\ .3 = [f(c) = 123.67, h = 0.1, RateOfChange = 56.700] \\ .4 = [f(d) = 118.5607, h = 0.01, RateOfChange = 56.070] \\ .5 = [RateOfChange\ at\ the\ point\ a = 56] \end{bmatrix}$$

$$Ans7 = \begin{bmatrix} .1 = [f(r) = 2\pi r] \\ .2 = [f(r+h) = 2\pi (r+h)] \\ .3 = \left[\frac{2\pi (r+h) - 2\pi r}{h}\right] \\ [.4 = [2\pi], .5 = [2\pi], .6 = [2\pi]] \end{bmatrix}, \quad , Ans8 = \begin{bmatrix} .1 = [f(r) = \pi r^2] \\ .2 = [f(r+h) = \pi (r+h)^2] \\ .3 = \left[\frac{\pi (r+h)^2 - \pi r^2}{h}\right] \\ [.4 = [2\pi r], .5 = [16\pi], .6 = [8\pi]] \end{bmatrix}$$

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

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Diff01 Answers for No.11585

$$Ans1 = (k=3), \quad , Ans2 = (k=4), \quad , Ans3 = \begin{bmatrix} a = -7 \\ b = 28 \end{bmatrix}, \quad , Ans4 = \begin{bmatrix} a = 7 \\ b = 5 \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (1, 8) \\ .2 = (6, 43) \\ .3 = 7 \\ .4 = (2, 11) \\ .5 = 3 \\ .6 = 2 \end{bmatrix}, \quad , Ans6 = \begin{bmatrix} .1 = [\mathrm{f}(a) = 37] \\ .2 = [\mathrm{f}(b) = 40.28, h = 0.2, RateOfChange = 16.400] \\ .3 = [\mathrm{f}(c) = 38.62, h = 0.1, RateOfChange = 16.200] \\ .4 = [\mathrm{f}(d) = 37.1602, h = 0.01, RateOfChange = 16.020] \\ .5 = [RateOfChange\ at\ the\ point\ a = 16] \end{bmatrix}$$

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

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

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Diff01 Answers for No.11593

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

$$Ans5 = \begin{bmatrix} .1 = (1, 6) \\ .2 = (4, 21) \\ .3 = 5 \\ .4 = (2, 9) \\ .5 = 3 \\ .6 = 2 \end{bmatrix}, \quad , \; Ans6 = \begin{bmatrix} .1 = [\mathrm{f}(a) = 28] \\ .2 = [\mathrm{f}(b) = 32.20,\ h = 0.2,\ RateOfChange = 21.000] \\ .3 = [\mathrm{f}(c) = 30.05,\ h = 0.1,\ RateOfChange = 20.500] \\ .4 = [\mathrm{f}(d) = 28.2005,\ h = 0.01,\ RateOfChange = 20.050] \\ .5 = [RateOfChange\ at\ the\ point\ a = 20] \end{bmatrix}$$

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

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

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Diff01 Answers for No.11633

$$Ans1 = (k=3), \quad , \quad Ans2 = (k=6), \quad , \quad Ans3 = \begin{bmatrix} a=74 \\ b=7 \end{bmatrix}, \quad , \quad Ans4 = \begin{bmatrix} a=7 \\ b=2 \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (2,9) \\ .2 = (5,30) \\ .3 = 7 \\ .4 = (3,14) \\ .5 = 5 \\ .6 = 4 \end{bmatrix}, \quad , \quad Ans6 = \begin{bmatrix} .1 = [\,f(a) = 23\,] \\ .2 = [\,f(b) = 28.88,\ h = 0.2,\ RateOfChange = 29.400\,] \\ .3 = [\,f(c) = 25.87,\ h = 0.1,\ RateOfChange = 28.700\,] \\ .4 = [\,f(d) = 23.2807,\ h = 0.01,\ RateOfChange = 28.070\,] \\ .5 = [\,RateOfChange\ at\ the\ point\ a = 28\,] \end{bmatrix}$$

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

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

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Diff01 Answers for No.11636

$$Ans1 = (k = 6), \quad , \quad Ans2 = (k = 5), \quad , \quad Ans3 = \begin{bmatrix} a = 13 \\ b = 3 \end{bmatrix}, \quad , \quad Ans4 = \begin{bmatrix} a = 5 \\ b = 2 \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (4, 9) \\ .2 = (7, 30) \\ .3 = 7 \\ .4 = (5, 14) \\ .5 = 5 \\ .6 = 4 \end{bmatrix}, \quad , \quad Ans6 = \begin{bmatrix} .1 = [\mathrm{f}(a) = 23] \\ .2 = [\mathrm{f}(b) = 27.20, h = 0.2, RateOfChange = 21.000] \\ .3 = [\mathrm{f}(c) = 25.05, h = 0.1, RateOfChange = 20.500] \\ .4 = [\mathrm{f}(d) = 23.2005, h = 0.01, RateOfChange = 20.050] \\ .5 = [RateOfChange\ at\ the\ point\ a = 20] \end{bmatrix}$$

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

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

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Diff01 Answers for No.11650

$$Ans1 = (k = 4), \quad , \quad Ans2 = (k = 5), \quad , \quad Ans3 = \begin{bmatrix} a = 5 \\ b = 3 \end{bmatrix}, \quad , \quad Ans4 = \begin{bmatrix} a = 6 \\ b = 3 \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (4, 8) \\ .2 = (7, 23) \\ .3 = 5 \\ .4 = (5, 11) \\ .5 = 3 \\ .6 = 2 \end{bmatrix}, \quad , \quad Ans6 = \begin{bmatrix} .1 = [\mathrm{f}(a) = 121] \\ .2 = [\mathrm{f}(b) = 134.12,\ h = 0.2,\ RateOfChange = 65.600] \\ .3 = [\mathrm{f}(c) = 127.48,\ h = 0.1,\ RateOfChange = 64.800] \\ .4 = [\mathrm{f}(d) = 121.6408,\ h = 0.01,\ RateOfChange = 64.080] \\ .5 = [RateOfChange\ at\ the\ point\ a = 64] \end{bmatrix}$$

$$Ans7 = \begin{bmatrix} .1 = [\mathrm{f}(r) = 2\,\pi\,r] \\ .2 = [\mathrm{f}(r+h) = 2\,\pi\,(r+h)] \\ .3 = \left[\dfrac{2\,\pi\,(r+h) - 2\,\pi\,r}{h}\right] \\ [.4 = [2\,\pi],\ .5 = [2\,\pi],\ .6 = [2\,\pi]] \end{bmatrix}, \quad , \quad Ans8 = \begin{bmatrix} .1 = [\mathrm{f}(r) = \pi\,r^2] \\ .2 = [\mathrm{f}(r+h) = \pi\,(r+h)^2] \\ .3 = \left[\dfrac{\pi\,(r+h)^2 - \pi\,r^2}{h}\right] \\ [.4 = [2\,\pi\,r],\ .5 = [14\,\pi],\ .6 = [10\,\pi]] \end{bmatrix}$$

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

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Diff01 Answers for No.12273

$$Ans1 = (k = 4), \quad , \quad Ans2 = (k = 4), \quad , \quad Ans3 = \begin{bmatrix} a = -4 \\ b = 2 \end{bmatrix}, \quad , \quad Ans4 = \begin{bmatrix} a = 7 \\ b = 3 \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (3, 11) \\ .2 = (5, 23) \\ .3 = 6 \\ .4 = (4, 16) \\ .5 = 5 \\ .6 = 4 \end{bmatrix}, \quad , \quad Ans6 = \begin{bmatrix} .1 = [\mathrm{f}(a) = 86] \\ .2 = [\mathrm{f}(b) = 94.20,\ h = 0.2,\ RateOfChange = 41.000] \\ .3 = [\mathrm{f}(c) = 90.05,\ h = 0.1,\ RateOfChange = 40.500] \\ .4 = [\mathrm{f}(d) = 86.4005,\ h = 0.01,\ RateOfChange = 40.050] \\ .5 = [RateOfChange\ at\ the\ point\ a = 40] \end{bmatrix}$$

$$Ans7 = \begin{bmatrix} .1 = [\mathrm{f}(r) = 2\,\pi\,r] \\ .2 = [\mathrm{f}(r+h) = 2\,\pi\,(r+h)] \\ .3 = \left[\frac{2\,\pi\,(r+h) - 2\,\pi\,r}{h}\right] \\ [.4 = [2\,\pi], .5 = [2\,\pi], .6 = [2\,\pi]] \end{bmatrix}, \quad , \quad Ans8 = \begin{bmatrix} .1 = [\mathrm{f}(r) = \pi\,r^2] \\ .2 = [\mathrm{f}(r+h) = \pi\,(r+h)^2] \\ .3 = \left[\frac{\pi\,(r+h)^2 - \pi\,r^2}{h}\right] \\ [.4 = [2\,\pi\,r], .5 = [16\,\pi], .6 = [12\,\pi]] \end{bmatrix}$$

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

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Diff01 Answers for No.12356

$$Ans1 = (k = -7), \quad , Ans2 = (k = 3), \quad , Ans3 = \begin{bmatrix} a = 2 \\ b = 2 \end{bmatrix}, \quad , Ans4 = \begin{bmatrix} a = 7 \\ b = 5 \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (5, 6) \\ .2 = (7, 18) \\ .3 = 6 \\ .4 = (6, 11) \\ .5 = 5 \\ .6 = 4 \end{bmatrix}, \quad , Ans6 = \begin{bmatrix} .1 = [\mathrm{f}(a) = 35] \\ .2 = [\mathrm{f}(b) = 41.72, h = 0.2, RateOfChange = 33.600] \\ .3 = [\mathrm{f}(c) = 38.28, h = 0.1, RateOfChange = 32.800] \\ .4 = [\mathrm{f}(d) = 35.3208, h = 0.01, RateOfChange = 32.080] \\ .5 = [RateOfChange\ at\ the\ point\ a = 32] \end{bmatrix}$$

$$Ans7 = \begin{bmatrix} .1 = [\mathrm{f}(r) = 2\pi r] \\ .2 = [\mathrm{f}(r+h) = 2\pi(r+h)] \\ .3 = \left[\dfrac{2\pi(r+h) - 2\pi r}{h}\right] \\ [.4 = [2\pi], .5 = [2\pi], .6 = [2\pi]] \end{bmatrix}, \quad , Ans8 = \begin{bmatrix} .1 = [\mathrm{f}(r) = \pi r^2] \\ .2 = [\mathrm{f}(r+h) = \pi(r+h)^2] \\ .3 = \left[\dfrac{\pi(r+h)^2 - \pi r^2}{h}\right] \\ [.4 = [2\pi r], .5 = [12\pi], .6 = [16\pi]] \end{bmatrix}$$

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

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Diff01 Answers for No.12585

$$Ans1 = (k = 2), \quad , \quad Ans2 = (k = 6), \quad , \quad Ans3 = \begin{bmatrix} a = -28 \\ b = 6 \end{bmatrix}, \quad , \quad Ans4 = \begin{bmatrix} a = 6 \\ b = 8 \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (3, 9) \\ .2 = (7, 41) \\ .3 = 8 \\ .4 = (4, 14) \\ .5 = 5 \\ .6 = 4 \end{bmatrix}, \quad , \quad Ans6 = \begin{bmatrix} .1 = [\mathrm{f}(a) = 109] \\ .2 = [\mathrm{f}(b) = 120.48, h = 0.2, RateOfChange = 57.400] \\ .3 = [\mathrm{f}(c) = 114.67, h = 0.1, RateOfChange = 56.700] \\ .4 = [\mathrm{f}(d) = 109.5607, h = 0.01, RateOfChange = 56.070] \\ .5 = [RateOfChange\ at\ the\ point\ a = 56] \end{bmatrix}$$

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

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

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Diff01 Answers for No.12667

$$Ans1 = (k = 2), \quad , \; Ans2 = (k = 5), \quad , \; Ans3 = \begin{bmatrix} a = 2 \\ b = 25 \end{bmatrix}, \quad , \; Ans4 = \begin{bmatrix} a = 4 \\ b = 8 \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (4, 4) \\ .2 = (7, 19) \\ .3 = 5 \\ .4 = (5, 7) \\ .5 = 3 \\ .6 = 2 \end{bmatrix}, \quad , \; Ans6 = \begin{bmatrix} .1 = [\mathrm{f}(a) = 5] \\ .2 = [\mathrm{f}(b) = 7.52, h = 0.2, RateOfChange = 12.600] \\ .3 = [\mathrm{f}(c) = 6.23, h = 0.1, RateOfChange = 12.300] \\ .4 = [\mathrm{f}(d) = 5.1203, h = 0.01, RateOfChange = 12.030] \\ .5 = [RateOfChange\ at\ the\ point\ a = 12] \end{bmatrix}$$

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

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

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Diff01 Answers for No.12678

$$Ans1 = (k = 34), \quad , Ans2 = (k = 3), \quad , Ans3 = \begin{bmatrix} a = 2 \\ b = 6 \end{bmatrix}, \quad , Ans4 = \begin{bmatrix} a = 6 \\ b = 8 \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (1, 5) \\ .2 = (6, 40) \\ .3 = 7 \\ .4 = (2, 8) \\ .5 = 3 \\ .6 = 2 \end{bmatrix}, \quad , Ans6 = \begin{bmatrix} .1 = [\mathrm{f}(a) = 16] \\ .2 = [\mathrm{f}(b) = 18.52, h = 0.2, RateOfChange = 12.600] \\ .3 = [\mathrm{f}(c) = 17.23, h = 0.1, RateOfChange = 12.300] \\ .4 = [\mathrm{f}(d) = 16.1203, h = 0.01, RateOfChange = 12.030] \\ .5 = [RateOfChange\ at\ the\ point\ a = 12] \end{bmatrix}$$

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

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

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Diff01 Answers for No.12690

$$Ans1 = (k = -7), \quad , Ans2 = (k = 3), \quad , Ans3 = \begin{bmatrix} a = 2 \\ b = 4 \end{bmatrix}, \quad , Ans4 = \begin{bmatrix} a = 7 \\ b = 2 \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (4, 4) \\ .2 = (7, 19) \\ .3 = 5 \\ .4 = (5, 7) \\ .5 = 3 \\ .6 = 2 \end{bmatrix}, \quad , Ans6 = \begin{bmatrix} .1 = [\mathrm{f}(a) = 39] \\ .2 = [\mathrm{f}(b) = 45.72, h = 0.2, RateOfChange = 33.600] \\ .3 = [\mathrm{f}(c) = 42.28, h = 0.1, RateOfChange = 32.800] \\ .4 = [\mathrm{f}(d) = 39.3208, h = 0.01, RateOfChange = 32.080] \\ .5 = [RateOfChange\ at\ the\ point\ a = 32] \end{bmatrix}$$

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

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

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Diff01 Answers for No.12696

$$Ans1 = (k=2), \quad , \quad Ans2 = (k=4), \quad , \quad Ans3 = \begin{bmatrix} a=-2 \\ b=3 \end{bmatrix}, \quad , \quad Ans4 = \begin{bmatrix} a=3 \\ b=5 \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (1, 4) \\ .2 = (6, 39) \\ .3 = 7 \\ .4 = (2, 7) \\ .5 = 3 \\ .6 = 2 \end{bmatrix}, \quad , \quad Ans6 = \begin{bmatrix} .1 = [\mathrm{f}(a) = 52] \\ .2 = [\mathrm{f}(b) = 58.20, h = 0.2, RateOfChange = 31.000] \\ .3 = [\mathrm{f}(c) = 55.05, h = 0.1, RateOfChange = 30.500] \\ .4 = [\mathrm{f}(d) = 52.3005, h = 0.01, RateOfChange = 30.050] \\ .5 = [RateOfChange\ at\ the\ point\ a = 30] \end{bmatrix}$$

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

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

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Diff01 Answers for No.12777

$$Ans1 = (k = -2), \quad , Ans2 = (k = 6), \quad , Ans3 = \begin{bmatrix} a = 1 \\ b = -5 \end{bmatrix}, \quad , Ans4 = \begin{bmatrix} a = 2 \\ b = 6 \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (2, 9) \\ .2 = (5, 30) \\ .3 = 7 \\ .4 = (3, 14) \\ .5 = 5 \\ .6 = 4 \end{bmatrix}, \quad , Ans6 = \begin{bmatrix} .1 = [\mathrm{f}(a) = 72] \\ .2 = [\mathrm{f}(b) = 80.20, h = 0.2, RateOfChange = 41.000] \\ .3 = [\mathrm{f}(c) = 76.05, h = 0.1, RateOfChange = 40.500] \\ .4 = [\mathrm{f}(d) = 72.4005, h = 0.01, RateOfChange = 40.050] \\ .5 = [RateOfChange\ at\ the\ point\ a = 40] \end{bmatrix}$$

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

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

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Diff01 Answers for No.12785

$$Ans1 = (k = -6), \quad , \quad Ans2 = (k = 2), \quad , \quad Ans3 = \begin{bmatrix} a = 7 \\ b = -20 \end{bmatrix}, \quad , \quad Ans4 = \begin{bmatrix} a = 2 \\ b = 7 \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (2, 5) \\ .2 = (6, 37) \\ .3 = 8 \\ .4 = (3, 10) \\ .5 = 5 \\ .6 = 4 \end{bmatrix}, \quad , \quad Ans6 = \begin{bmatrix} .1 = [f(a) = 19] \\ .2 = [f(b) = 24.04, h = 0.2, RateOfChange = 25.200] \\ .3 = [f(c) = 21.46, h = 0.1, RateOfChange = 24.600] \\ .4 = [f(d) = 19.2406, h = 0.01, RateOfChange = 24.060] \\ .5 = [RateOfChange\ at\ the\ point\ a = 24] \end{bmatrix}$$

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

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

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Diff01 Answers for No.13085

$$Ans1 = (k = 3), \quad , Ans2 = (k = 6), \quad , Ans3 = \begin{bmatrix} a = 3 \\ b = 1 \end{bmatrix}, \quad , Ans4 = \begin{bmatrix} a = 5 \\ b = 8 \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (3, 6) \\ .2 = (6, 21) \\ .3 = 5 \\ .4 = (4, 9) \\ .5 = 3 \\ .6 = 2 \end{bmatrix}, \quad , Ans6 = \begin{bmatrix} .1 = [\mathrm{f}(a) = 49] \\ .2 = [\mathrm{f}(b) = 56.44, h = 0.2, RateOfChange = 37.200] \\ .3 = [\mathrm{f}(c) = 52.66, h = 0.1, RateOfChange = 36.600] \\ .4 = [\mathrm{f}(d) = 49.3606, h = 0.01, RateOfChange = 36.060] \\ .5 = [RateOfChange\ at\ the\ point\ a = 36] \end{bmatrix}$$

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

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

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