Diff01 Answers for No.9594

$$Ans1 = (k = 27), \quad , \quad Ans2 = (k = 3), \quad , \quad Ans3 = \begin{bmatrix} a = 3 \\ b = 2 \end{bmatrix}, \quad , \quad Ans4 = \begin{bmatrix} a = 8 \\ b = 2 \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (3, 11) \\ .2 = (6, 32) \\ .3 = 7 \\ .4 = (4, 16) \\ .5 = 5 \\ .6 = 4 \end{bmatrix}, \quad , \quad Ans6 = \begin{bmatrix} .1 = [\mathrm{f}(a) = 61] \\ .2 = [\mathrm{f}(b) = 69.68, h = 0.2, RateOfChange = 43.400] \\ .3 = [\mathrm{f}(c) = 65.27, h = 0.1, RateOfChange = 42.700] \\ .4 = [\mathrm{f}(d) = 61.4207, h = 0.01, RateOfChange = 42.070] \\ .5 = [RateOfChange\ at\ the\ point\ a = 42] \end{bmatrix}$$

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

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

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Diff01 Answers for No.9608

$$Ans1 = (k = 3), \quad , \quad Ans2 = (k = 2), \quad , \quad Ans3 = \begin{bmatrix} a = 46 \\ b = 1 \end{bmatrix}, \quad , \quad Ans4 = \begin{bmatrix} a = 8 \\ b = 5 \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (2, 10) \\ .2 = (6, 42) \\ .3 = 8 \\ .4 = (3, 15) \\ .5 = 5 \\ .6 = 4 \end{bmatrix}, \quad , \quad Ans6 = \begin{bmatrix} .1 = [\mathrm{f}(a) = 115] \\ .2 = [\mathrm{f}(b) = 126.48, h = 0.2, RateOfChange = 57.400] \\ .3 = [\mathrm{f}(c) = 120.67, h = 0.1, RateOfChange = 56.700] \\ .4 = [\mathrm{f}(d) = 115.5607, h = 0.01, RateOfChange = 56.070] \\ .5 = [RateOfChange\ at\ the\ point\ a = 56] \end{bmatrix}$$

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

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

Diff01 Answers for No.9646

$$Ans1 = (k = 3), \quad , \quad Ans2 = (k = 2), \quad , \quad Ans3 = \begin{bmatrix} a = -37 \\ b = 2 \end{bmatrix}, \quad , \quad Ans4 = \begin{bmatrix} a = 3 \\ b = 5 \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (3, 8) \\ .2 = (8, 43) \\ .3 = 7 \\ .4 = (4, 11) \\ .5 = 3 \\ .6 = 2 \end{bmatrix}, \quad , \quad Ans6 = \begin{bmatrix} .1 = [f(a) = 17] \\ .2 = [f(b) = 19.52, h = 0.2, RateOfChange = 12.600] \\ .3 = [f(c) = 18.23, h = 0.1, RateOfChange = 12.300] \\ .4 = [f(d) = 17.1203, h = 0.01, RateOfChange = 12.030] \\ .5 = [RateOfChange\ at\ the\ point\ a = 12] \end{bmatrix}$$

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

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

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Diff01 Answers for No.9649

$$Ans1 = (k = 50), \quad , Ans2 = (k = 2), \quad , Ans3 = \begin{bmatrix} a = -2 \\ b = 2 \end{bmatrix}, \quad , Ans4 = \begin{bmatrix} a = 2 \\ b = 6 \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (1, 4) \\ .2 = (6, 39) \\ .3 = 7 \\ .4 = (2, 7) \\ .5 = 3 \\ .6 = 2 \end{bmatrix}, \quad , Ans6 = \begin{bmatrix} .1 = [\mathrm{f}(a) = 16] \\ .2 = [\mathrm{f}(b) = 20.20, h = 0.2, RateOfChange = 21.000] \\ .3 = [\mathrm{f}(c) = 18.05, h = 0.1, RateOfChange = 20.500] \\ .4 = [\mathrm{f}(d) = 16.2005, h = 0.01, RateOfChange = 20.050] \\ .5 = [RateOfChange\ at\ the\ point\ a = 20] \end{bmatrix}$$

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

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

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Diff01 Answers for No.9669

$$Ans1 = (k = -7), \quad , \quad Ans2 = (k = 6), \quad , \quad Ans3 = \begin{bmatrix} a = -1 \\ b = 3 \end{bmatrix}, \quad , \quad Ans4 = \begin{bmatrix} a = 8 \\ b = 3 \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (1, 8) \\ .2 = (5, 32) \\ .3 = 6 \\ .4 = (2, 11) \\ .5 = 3 \\ .6 = 2 \end{bmatrix}, \quad , \quad Ans6 = \begin{bmatrix} .1 = [\mathrm{f}(a) = 53] \\ .2 = [\mathrm{f}(b) = 57.92,\ h = 0.2,\ RateOfChange = 24.600] \\ .3 = [\mathrm{f}(c) = 55.43,\ h = 0.1,\ RateOfChange = 24.300] \\ .4 = [\mathrm{f}(d) = 53.2403,\ h = 0.01,\ RateOfChange = 24.030] \\ .5 = [RateOfChange\ at\ the\ point\ a = 24] \end{bmatrix}$$

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

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

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Diff01 Answers for No.9717

$$Ans1 = (k = -1), \quad , \quad Ans2 = (k = 4), \quad , \quad Ans3 = \begin{bmatrix} a = 3 \\ b = -3 \end{bmatrix}, \quad , \quad Ans4 = \begin{bmatrix} a = 8 \\ b = 5 \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (3, 9) \\ .2 = (7, 41) \\ .3 = 8 \\ .4 = (4, 14) \\ .5 = 5 \\ .6 = 4 \end{bmatrix}, \quad , \quad Ans6 = \begin{bmatrix} .1 = [\mathrm{f}(a) = 41] \\ .2 = [\mathrm{f}(b) = 45.96,\ h = 0.2,\ RateOfChange = 24.800] \\ .3 = [\mathrm{f}(c) = 43.44,\ h = 0.1,\ RateOfChange = 24.400] \\ .4 = [\mathrm{f}(d) = 41.2404,\ h = 0.01,\ RateOfChange = 24.040] \\ .5 = [RateOfChange\ at\ the\ point\ a = 24] \end{bmatrix}$$

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

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

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Diff01 Answers for No.9763

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

$$Ans5 = \begin{bmatrix} .1 = (4, 4) \\ .2 = (8, 28) \\ .3 = 6 \\ .4 = (5, 7) \\ .5 = 3 \\ .6 = 2 \end{bmatrix}, \quad , \quad Ans6 = \begin{bmatrix} .1 = [f(a) = 104] \\ .2 = [f(b) = 115.48, h = 0.2, RateOfChange = 57.400] \\ .3 = [f(c) = 109.67, h = 0.1, RateOfChange = 56.700] \\ .4 = [f(d) = 104.5607, h = 0.01, RateOfChange = 56.070] \\ .5 = [RateOfChange\ at\ the\ point\ a = 56] \end{bmatrix}$$

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

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

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Diff01 Answers for No.9877

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

$$Ans5 = \begin{bmatrix} .1 = (2, 6) \\ .2 = (7, 41) \\ .3 = 7 \\ .4 = (3, 9) \\ .5 = 3 \\ .6 = 2 \end{bmatrix}, \quad , Ans6 = \begin{bmatrix} .1 = [\mathrm{f}(a) = 43] \\ .2 = [\mathrm{f}(b) = 47.96, h = 0.2, RateOfChange = 24.800] \\ .3 = [\mathrm{f}(c) = 45.44, h = 0.1, RateOfChange = 24.400] \\ .4 = [\mathrm{f}(d) = 43.2404, h = 0.01, RateOfChange = 24.040] \\ .5 = [RateOfChange\ at\ the\ point\ a = 24] \end{bmatrix}$$

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

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

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Diff01 Answers for No.9911

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

$$Ans5 = \begin{bmatrix} .1 = (4, 3) \\ .2 = (8, 27) \\ .3 = 6 \\ .4 = (5, 6) \\ .5 = 3 \\ .6 = 2 \end{bmatrix}, \quad , \quad Ans6 = \begin{bmatrix} .1 = [\mathrm{f}(a) = 18] \\ .2 = [\mathrm{f}(b) = 22.20,\ h = 0.2,\ RateOfChange = 21.000] \\ .3 = [\mathrm{f}(c) = 20.05,\ h = 0.1,\ RateOfChange = 20.500] \\ .4 = [\mathrm{f}(d) = 18.2005,\ h = 0.01,\ RateOfChange = 20.050] \\ .5 = [RateOfChange\ at\ the\ point\ a = 20] \end{bmatrix}$$

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

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

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Diff01 Answers for No.10027

$$Ans1 = (k = 2), \quad , \quad Ans2 = (k = 5), \quad , \quad Ans3 = \begin{bmatrix} a = -48 \\ b = 1 \end{bmatrix}, \quad , \quad Ans4 = \begin{bmatrix} a = 6 \\ b = 3 \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (4, 7) \\ .2 = (6, 19) \\ .3 = 6 \\ .4 = (5, 12) \\ .5 = 5 \\ .6 = 4 \end{bmatrix}, \quad , \quad Ans6 = \begin{bmatrix} .1 = [\mathrm{f}(a) = 108] \\ .2 = [\mathrm{f}(b) = 119.48,\ h = 0.2,\ RateOfChange = 57.400] \\ .3 = [\mathrm{f}(c) = 113.67,\ h = 0.1,\ RateOfChange = 56.700] \\ .4 = [\mathrm{f}(d) = 108.5607,\ h = 0.01,\ RateOfChange = 56.070] \\ .5 = [RateOfChange\ at\ the\ point\ a = 56] \end{bmatrix}$$

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

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

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Diff01 Answers for No.10063

$$Ans1 = (k = 5), \quad , Ans2 = (k = 4), \quad , Ans3 = \begin{bmatrix} a = 2 \\ b = 26 \end{bmatrix}, \quad , Ans4 = \begin{bmatrix} a = 6 \\ b = 2 \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (5, 10) \\ .2 = (8, 31) \\ .3 = 7 \\ .4 = (6, 15) \\ .5 = 5 \\ .6 = 4 \end{bmatrix}, \quad , Ans6 = \begin{bmatrix} .1 = [\mathrm{f}(a) = 15] \\ .2 = [\mathrm{f}(b) = 17.48, h = 0.2, RateOfChange = 12.400] \\ .3 = [\mathrm{f}(c) = 16.22, h = 0.1, RateOfChange = 12.200] \\ .4 = [\mathrm{f}(d) = 15.1202, h = 0.01, RateOfChange = 12.020] \\ .5 = [RateOfChange\ at\ the\ point\ a = 12] \end{bmatrix}$$

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

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

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Diff01 Answers for No.10120

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

$$Ans5 = \begin{bmatrix} .1 = (2, 2) \\ .2 = (6, 26) \\ .3 = 6 \\ .4 = (3, 5) \\ .5 = 3 \\ .6 = 2 \end{bmatrix}, \quad , Ans6 = \begin{bmatrix} .1 = [f(a) = 29] \\ .2 = [f(b) = 32.28, h = 0.2, RateOfChange = 16.400] \\ .3 = [f(c) = 30.62, h = 0.1, RateOfChange = 16.200] \\ .4 = [f(d) = 29.1602, h = 0.01, RateOfChange = 16.020] \\ .5 = [RateOfChange\ at\ the\ point\ a = 16] \end{bmatrix}$$

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

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

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Diff01 Answers for No.10367

$$Ans1 = (k = 7), \quad , \quad Ans2 = (k = 3), \quad , \quad Ans3 = \begin{bmatrix} a = -42 \\ b = 1 \end{bmatrix}, \quad , \quad Ans4 = \begin{bmatrix} a = 4 \\ b = 7 \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (4, 10) \\ .2 = (8, 42) \\ .3 = 8 \\ .4 = (5, 15) \\ .5 = 5 \\ .6 = 4 \end{bmatrix}, \quad , \quad Ans6 = \begin{bmatrix} .1 = [\mathrm{f}(a) = 68] \\ .2 = [\mathrm{f}(b) = 76.68,\ h = 0.2,\ RateOfChange = 43.400] \\ .3 = [\mathrm{f}(c) = 72.27,\ h = 0.1,\ RateOfChange = 42.700] \\ .4 = [\mathrm{f}(d) = 68.4207,\ h = 0.01,\ RateOfChange = 42.070] \\ .5 = [RateOfChange\ at\ the\ point\ a = 42] \end{bmatrix}$$

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

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

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Diff01 Answers for No.10372

$$Ans1 = (k = 5), \quad , \; Ans2 = (k = 6), \quad , \; Ans3 = \begin{bmatrix} a = -4 \\ b = -2 \end{bmatrix}, \quad , \; Ans4 = \begin{bmatrix} a = 6 \\ b = 8 \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (2, 7) \\ .2 = (6, 39) \\ .3 = 8 \\ .4 = (3, 12) \\ .5 = 5 \\ .6 = 4 \end{bmatrix}, \quad , \; Ans6 = \begin{bmatrix} .1 = [\mathrm{f}(a) = 77] \\ .2 = [\mathrm{f}(b) = 85.20, h = 0.2, RateOfChange = 41.000] \\ .3 = [\mathrm{f}(c) = 81.05, h = 0.1, RateOfChange = 40.500] \\ .4 = [\mathrm{f}(d) = 77.4005, h = 0.01, RateOfChange = 40.050] \\ .5 = [RateOfChange\ at\ the\ point\ a = 40] \end{bmatrix}$$

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

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

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Diff01 Answers for No.10375

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

$$Ans5 = \begin{bmatrix} .1 = (4, 10) \\ .2 = (7, 31) \\ .3 = 7 \\ .4 = (5, 15) \\ .5 = 5 \\ .6 = 4 \end{bmatrix}, \quad , Ans6 = \begin{bmatrix} .1 = [\mathrm{f}(a) = 47] \\ .2 = [\mathrm{f}(b) = 54.44, h = 0.2, RateOfChange = 37.200] \\ .3 = [\mathrm{f}(c) = 50.66, h = 0.1, RateOfChange = 36.600] \\ .4 = [\mathrm{f}(d) = 47.3606, h = 0.01, RateOfChange = 36.060] \\ .5 = [RateOfChange\ at\ the\ point\ a = 36] \end{bmatrix}$$

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

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

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Diff01 Answers for No.10426

$$Ans1 = (k=2), \quad , Ans2 = (k=5), \quad , Ans3 = \begin{bmatrix} a=5 \\ b=-54 \end{bmatrix}, \quad , Ans4 = \begin{bmatrix} a=6 \\ b=4 \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (2, 9) \\ .2 = (4, 21) \\ .3 = 6 \\ .4 = (3, 14) \\ .5 = 5 \\ .6 = 4 \end{bmatrix}, \quad , Ans6 = \begin{bmatrix} .1 = [\mathrm{f}(a) = 20] \\ .2 = [\mathrm{f}(b) = 22.52, h = 0.2, RateOfChange = 12.600] \\ .3 = [\mathrm{f}(c) = 21.23, h = 0.1, RateOfChange = 12.300] \\ .4 = [\mathrm{f}(d) = 20.1203, h = 0.01, RateOfChange = 12.030] \\ .5 = [RateOfChange\ at\ the\ point\ a = 12] \end{bmatrix}$$

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

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

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Diff01 Answers for No.10628

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

$$Ans5 = \begin{bmatrix} .1 = (5, 7) \\ .2 = (8, 28) \\ .3 = 7 \\ .4 = (6, 12) \\ .5 = 5 \\ .6 = 4 \end{bmatrix}, \quad , \quad Ans6 = \begin{bmatrix} .1 = [\mathrm{f}(a) = 31] \\ .2 = [\mathrm{f}(b) = 36.04,\ h = 0.2,\ RateOfChange = 25.200] \\ .3 = [\mathrm{f}(c) = 33.46,\ h = 0.1,\ RateOfChange = 24.600] \\ .4 = [\mathrm{f}(d) = 31.2406,\ h = 0.01,\ RateOfChange = 24.060] \\ .5 = [RateOfChange\ at\ the\ point\ a = 24] \end{bmatrix}$$

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

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

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Diff01 Answers for No.11408

$$Ans1 = (k = 6), \quad , Ans2 = (k = 4), \quad , Ans3 = \begin{bmatrix} a = 3 \\ b = 5 \end{bmatrix}, \quad , Ans4 = \begin{bmatrix} a = 2 \\ b = 7 \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (2, 6) \\ .2 = (5, 21) \\ .3 = 5 \\ .4 = (3, 9) \\ .5 = 3 \\ .6 = 2 \end{bmatrix}, \quad , Ans6 = \begin{bmatrix} .1 = [f(a) = 19] \\ .2 = [f(b) = 22.36, h = 0.2, RateOfChange = 16.800] \\ .3 = [f(c) = 20.64, h = 0.1, RateOfChange = 16.400] \\ .4 = [f(d) = 19.1604, h = 0.01, RateOfChange = 16.040] \\ .5 = [RateOfChange\ at\ the\ point\ a = 16] \end{bmatrix}$$

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

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

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Diff01 Answers for No.11560

$$Ans1 = (k = 29), \quad , \quad Ans2 = (k = 6), \quad , \quad Ans3 = \begin{bmatrix} a = -19 \\ b = 1 \end{bmatrix}, \quad , \quad Ans4 = \begin{bmatrix} a = 8 \\ b = 6 \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (2, 7) \\ .2 = (6, 39) \\ .3 = 8 \\ .4 = (3, 12) \\ .5 = 5 \\ .6 = 4 \end{bmatrix}, \quad , \quad Ans6 = \begin{bmatrix} .1 = [\mathrm{f}(a) = 121] \\ .2 = [\mathrm{f}(b) = 134.12, h = 0.2, RateOfChange = 65.600] \\ .3 = [\mathrm{f}(c) = 127.48, h = 0.1, RateOfChange = 64.800] \\ .4 = [\mathrm{f}(d) = 121.6408, h = 0.01, RateOfChange = 64.080] \\ .5 = [RateOfChange\ at\ the\ point\ a = 64] \end{bmatrix}$$

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

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

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Diff01 Answers for No.11806

$$Ans1 = (k = 2), \quad , \quad Ans2 = (k = 4), \quad , \quad Ans3 = \begin{bmatrix} a = 1 \\ b = -5 \end{bmatrix}, \quad , \quad Ans4 = \begin{bmatrix} a = 4 \\ b = 8 \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (2, 8) \\ .2 = (7, 43) \\ .3 = 7 \\ .4 = (3, 11) \\ .5 = 3 \\ .6 = 2 \end{bmatrix}, \quad , \quad Ans6 = \begin{bmatrix} .1 = [\mathrm{f}(a) = 52] \\ .2 = [\mathrm{f}(b) = 58.20,\ h = 0.2,\ RateOfChange = 31.000] \\ .3 = [\mathrm{f}(c) = 55.05,\ h = 0.1,\ RateOfChange = 30.500] \\ .4 = [\mathrm{f}(d) = 52.3005,\ h = 0.01,\ RateOfChange = 30.050] \\ .5 = [RateOfChange\ at\ the\ point\ a = 30] \end{bmatrix}$$

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

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

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Diff01 Answers for No.12219

$$Ans1 = (k=7), \quad , \quad Ans2 = (k=4), \quad , \quad Ans3 = \begin{bmatrix} a=43 \\ b=2 \end{bmatrix}, \quad , \quad Ans4 = \begin{bmatrix} a=2 \\ b=4 \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (1, 5) \\ .2 = (5, 29) \\ .3 = 6 \\ .4 = (2, 8) \\ .5 = 3 \\ .6 = 2 \end{bmatrix}, \quad , \quad Ans6 = \begin{bmatrix} .1 = [f(a) = 16] \\ .2 = [f(b) = 18.52, h = 0.2, RateOfChange = 12.600] \\ .3 = [f(c) = 17.23, h = 0.1, RateOfChange = 12.300] \\ .4 = [f(d) = 16.1203, h = 0.01, RateOfChange = 12.030] \\ .5 = [RateOfChange\ at\ the\ point\ a = 12] \end{bmatrix}$$

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

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

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Diff01 Answers for No.12954

$$Ans1 = (k = 4), \quad , \; Ans2 = (k = 4), \quad , \; Ans3 = \begin{bmatrix} a = 3 \\ b = 2 \end{bmatrix}, \quad , \; Ans4 = \begin{bmatrix} a = 6 \\ b = 8 \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (4, 5) \\ .2 = (6, 17) \\ .3 = 6 \\ .4 = (5, 10) \\ .5 = 5 \\ .6 = 4 \end{bmatrix}, \quad , \; Ans6 = \begin{bmatrix} .1 = [\mathrm{f}(a) = 28] \\ .2 = [\mathrm{f}(b) = 32.20,\ h = 0.2,\ RateOfChange = 21.000] \\ .3 = [\mathrm{f}(c) = 30.05,\ h = 0.1,\ RateOfChange = 20.500] \\ .4 = [\mathrm{f}(d) = 28.2005,\ h = 0.01,\ RateOfChange = 20.050] \\ .5 = [RateOfChange\ at\ the\ point\ a = 20] \end{bmatrix}$$

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

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

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Diff01 Answers for No.12964

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

$$Ans5 = \begin{bmatrix} .1 = (3, 8) \\ .2 = (7, 40) \\ .3 = 8 \\ .4 = (4, 13) \\ .5 = 5 \\ .6 = 4 \end{bmatrix}, \quad , \quad Ans6 = \begin{bmatrix} .1 = [\mathrm{f}(a) = 59] \\ .2 = [\mathrm{f}(b) = 66.44, h = 0.2, RateOfChange = 37.200] \\ .3 = [\mathrm{f}(c) = 62.66, h = 0.1, RateOfChange = 36.600] \\ .4 = [\mathrm{f}(d) = 59.3606, h = 0.01, RateOfChange = 36.060] \\ .5 = [RateOfChange\ at\ the\ point\ a = 36] \end{bmatrix}$$

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

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

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Diff01 Answers for No.12971

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

$$Ans5 = \begin{bmatrix} .1 = (2, 7) \\ .2 = (6, 39) \\ .3 = 8 \\ .4 = (3, 12) \\ .5 = 5 \\ .6 = 4 \end{bmatrix}, \quad , \quad Ans6 = \begin{bmatrix} .1 = [\mathrm{f}(a) = 16] \\ .2 = [\mathrm{f}(b) = 20.20,\ h = 0.2,\ RateOfChange = 21.000] \\ .3 = [\mathrm{f}(c) = 18.05,\ h = 0.1,\ RateOfChange = 20.500] \\ .4 = [\mathrm{f}(d) = 16.2005,\ h = 0.01,\ RateOfChange = 20.050] \\ .5 = [RateOfChange\ at\ the\ point\ a = 20] \end{bmatrix}$$

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

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

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Diff01 Answers for No.13023

$$Ans1 = (k = 2), \quad , \quad Ans2 = (k = 5), \quad , \quad Ans3 = \begin{bmatrix} a = 2 \\ b = -13 \end{bmatrix}, \quad , \quad Ans4 = \begin{bmatrix} a = 8 \\ b = 4 \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (4, 6) \\ .2 = (9, 41) \\ .3 = 7 \\ .4 = (5, 9) \\ .5 = 3 \\ .6 = 2 \end{bmatrix}, \quad , \quad Ans6 = \begin{bmatrix} .1 = [\mathrm{f}(a) = 108] \\ .2 = [\mathrm{f}(b) = 119.48,\ h = 0.2,\ RateOfChange = 57.400] \\ .3 = [\mathrm{f}(c) = 113.67,\ h = 0.1,\ RateOfChange = 56.700] \\ .4 = [\mathrm{f}(d) = 108.5607,\ h = 0.01,\ RateOfChange = 56.070] \\ .5 = [RateOfChange\ at\ the\ point\ a = 56] \end{bmatrix}$$

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

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

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Diff01 Answers for No.13033

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

$$Ans5 = \begin{bmatrix} .1 = (1, 8) \\ .2 = (5, 32) \\ .3 = 6 \\ .4 = (2, 11) \\ .5 = 3 \\ .6 = 2 \end{bmatrix}, \quad , \quad Ans6 = \begin{bmatrix} .1 = [\mathrm{f}(a) = 16] \\ .2 = [\mathrm{f}(b) = 18.52,\ h = 0.2,\ RateOfChange = 12.600] \\ .3 = [\mathrm{f}(c) = 17.23,\ h = 0.1,\ RateOfChange = 12.300] \\ .4 = [\mathrm{f}(d) = 16.1203,\ h = 0.01,\ RateOfChange = 12.030] \\ .5 = [RateOfChange\ at\ the\ point\ a = 12] \end{bmatrix}$$

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

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

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Diff01 Answers for No.13197

$$Ans1 = (k=9), \quad , \quad Ans2 = (k=2), \quad , \quad Ans3 = \begin{bmatrix} a=26 \\ b=1 \end{bmatrix}, \quad , \quad Ans4 = \begin{bmatrix} a=2 \\ b=4 \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (2, 5) \\ .2 = (5, 20) \\ .3 = 5 \\ .4 = (3, 8) \\ .5 = 3 \\ .6 = 2 \end{bmatrix}, \quad , \quad Ans6 = \begin{bmatrix} .1 = [\mathrm{f}(a) = 83] \\ .2 = [\mathrm{f}(b) = 91.20, h = 0.2, RateOfChange = 41.000] \\ .3 = [\mathrm{f}(c) = 87.05, h = 0.1, RateOfChange = 40.500] \\ .4 = [\mathrm{f}(d) = 83.4005, h = 0.01, RateOfChange = 40.050] \\ .5 = [RateOfChange\ at\ the\ point\ a = 40] \end{bmatrix}$$

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

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

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Diff01 Answers for No.13907

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

$$Ans5 = \begin{bmatrix} .1 = (4, 2) \\ .2 = (7, 17) \\ .3 = 5 \\ .4 = (5, 5) \\ .5 = 3 \\ .6 = 2 \end{bmatrix},\quad ,\ Ans6 = \begin{bmatrix} .1 = [f(a) = 106] \\ .2 = [f(b) = 117.48, h = 0.2, RateOfChange = 57.400] \\ .3 = [f(c) = 111.67, h = 0.1, RateOfChange = 56.700] \\ .4 = [f(d) = 106.5607, h = 0.01, RateOfChange = 56.070] \\ .5 = [RateOfChange\ at\ the\ point\ a = 56] \end{bmatrix}$$

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

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

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Diff01 Answers for No.13991

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

$$Ans5 = \begin{bmatrix} .1 = (5, 7) \\ .2 = (8, 28) \\ .3 = 7 \\ .4 = (6, 12) \\ .5 = 5 \\ .6 = 4 \end{bmatrix}, \quad , \quad Ans6 = \begin{bmatrix} .1 = [\mathrm{f}(a) = 114] \\ .2 = [\mathrm{f}(b) = 125.48,\ h = 0.2,\ RateOfChange = 57.400] \\ .3 = [\mathrm{f}(c) = 119.67,\ h = 0.1,\ RateOfChange = 56.700] \\ .4 = [\mathrm{f}(d) = 114.5607,\ h = 0.01,\ RateOfChange = 56.070] \\ .5 = [RateOfChange\ at\ the\ point\ a = 56] \end{bmatrix}$$

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

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

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Diff01 Answers for No.14005

$$Ans1 = (k = -6), \quad , Ans2 = (k = 5), \quad , Ans3 = \begin{bmatrix} a = 11 \\ b = 1 \end{bmatrix}, \quad , Ans4 = \begin{bmatrix} a = 2 \\ b = 8 \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (3, 6) \\ .2 = (8, 41) \\ .3 = 7 \\ .4 = (4, 9) \\ .5 = 3 \\ .6 = 2 \end{bmatrix}, \quad , Ans6 = \begin{bmatrix} .1 = [\mathrm{f}(a) = 25] \\ .2 = [\mathrm{f}(b) = 30.88, h = 0.2, RateOfChange = 29.400] \\ .3 = [\mathrm{f}(c) = 27.87, h = 0.1, RateOfChange = 28.700] \\ .4 = [\mathrm{f}(d) = 25.2807, h = 0.01, RateOfChange = 28.070] \\ .5 = [RateOfChange\ at\ the\ point\ a = 28] \end{bmatrix}$$

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

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

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Diff01 Answers for No.14157

$$Ans1 = (k = 6), \quad , \quad Ans2 = (k = 5), \quad , \quad Ans3 = \begin{bmatrix} a = -3 \\ b = 2 \end{bmatrix}, \quad , \quad Ans4 = \begin{bmatrix} a = 7 \\ b = 4 \end{bmatrix}$$

$$Ans5 = \begin{bmatrix} .1 = (2, 9) \\ .2 = (5, 30) \\ .3 = 7 \\ .4 = (3, 14) \\ .5 = 5 \\ .6 = 4 \end{bmatrix}, \quad , \quad Ans6 = \begin{bmatrix} .1 = [\mathrm{f}(a) = 37] \\ .2 = [\mathrm{f}(b) = 43.72, h = 0.2, RateOfChange = 33.600] \\ .3 = [\mathrm{f}(c) = 40.28, h = 0.1, RateOfChange = 32.800] \\ .4 = [\mathrm{f}(d) = 37.3208, h = 0.01, RateOfChange = 32.080] \\ .5 = [RateOfChange\ at\ the\ point\ a = 32] \end{bmatrix}$$

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

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

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