

$$1. \left(8w^7 x^{-5} y^3 z^{-9} \right)^{-2/3}$$

$$\left(\frac{1}{8w^7 x^{-5} y^3 z^{-9}} \right)^{2/3}$$

$$\left(\frac{x^5 z^9}{8w^7 y^3} \right)^{2/3}$$

$$\left(\frac{x^5 z^9}{8w^7 y^3} \right)^{2/3} = \frac{x^{10/3} z^6}{4w^{14/3} y^2}$$

$$\text{Ans} = A = \left(\frac{x^{10/3} z^6}{4w^{14/3} y^2} \right)$$

$$2.) = S = \frac{D}{T} \quad D = 26.2 \text{ miles.}$$

$$T = \frac{D}{S} = \frac{26.2}{S} \quad t = \frac{26.2}{S}$$

$$\text{Ans} = D$$

$$3.) F = \frac{k}{d^2} \quad 8.2 = \frac{k}{(0.64)^2}$$

$$8.2 \times (0.64)^2 = k$$

$$3.35872 = k$$

$$F = \frac{3.35872}{(0.77)^2} \quad F = 5.7 \text{ Newton}$$

$$\text{Ans} = B$$

$$4.) \quad y = x^2 + 2x + 8 \quad -4x = x^2 + 2x + 8$$

$$x = -4 - 2$$

$$y = x^2 + 6x + 8$$

$$x^2 + 4x + 2x + 8$$

$$x(x+4) + 2x(x+4)$$

$$(2+x)(x+4)$$

$$x = -4 - 2$$

$$y = 8$$

$$\text{Ans} = C$$

$$5.) \quad h = 2w$$

$$(2 \times 10) + 50 = 2050$$

$$\frac{70t}{70} = \frac{2050}{70}$$

$$t = 20 \text{ inches}$$

$$D = 20 \text{ inches}$$

$$6.) \quad \begin{array}{l} \text{pen length} = x + 2 \\ \text{width} = x + 1 \end{array}$$

$$(x+2)16 = (16+2)$$

$$= 18 \text{ square metres}$$

$$= \text{Ans} = B = 18 \text{ square metres}$$

7.

$$8\% = \text{tax} = 0.08$$

$$15\% = \text{bus} = 0.15$$

$$60\% = \text{Bus} = 0.6$$

$$0.6 + 0.14 = 0.74$$

$$D = 0.74.$$

8.

$$f(x) = 2x^2 - 3x + 5$$

$$f(x) = 2x^2 - 3x + 5 + 8$$

$$f(x) = 2x^2 - 3x + 13$$

$$\text{Ans} = C$$

9)

$$2x^2 - 5x + 12 = 0$$

$$C = \frac{b^2}{2a} = \frac{5^2}{2 \times 2}$$

$$= \frac{25}{8}$$

$$\text{Ans} = C = \frac{25}{8}$$

10)

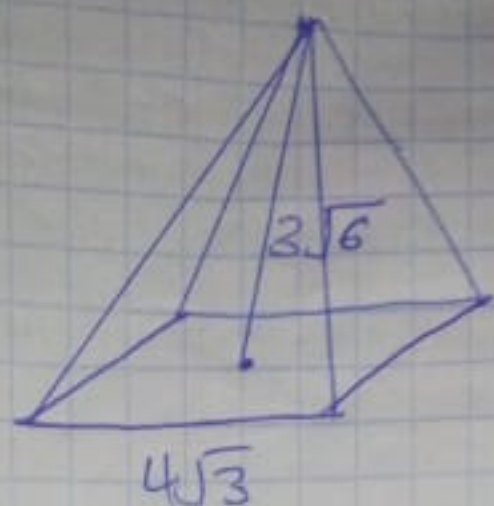
$$H = \sin 60 \times 10 = 8.66 \text{ cm}$$

$$x = \sin 30 \times 8.66 \text{ cm}$$

$$x = \frac{5\sqrt{3}}{2}$$

$$\text{Ans} = A = \frac{5\sqrt{3}}{2}$$

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$$\frac{1}{2} \times w \times L \times h$$

$$\frac{1}{3} \times 3\sqrt{6} \times 4\sqrt{3} \times 4\sqrt{12}$$

$$B = 4\sqrt{12}$$

$$\text{Ans} = B$$

12

$$y = x^2 - 6x + 10$$

$$(x-3)^2 + 1$$

$$(x-3)(x-3) + 1$$

$$x^2 - 3x - 3x + 9 + 1$$

$$= x^2 - 6x + 10$$

$$\text{Ans} = B = y = (x-3)^2 + 1$$

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$B =$ Rotation 180° Counter clock wise
around the Origin.