

9.2.3

HWK

9-88)

a) 15 cm b) 121cm^2 c) 20 m d) $\approx 12.25\text{ft}$

9-89)

a) if $x^2 = 36$, $x = 6$

b) if $x^2 = 65$, $x \approx 8.1$

c) if $x^2 = 84$, $x \approx 9.2$

d) if $x^2 = 13$, $x \approx 3.6$

9-90)

$$y = -2x + 5$$

a) slope = -2

b) (0, 5) y-intercept

9-91)

a) ~~$\begin{matrix} & 1.5 & \\ 0.3 & \times & 5 \\ & 5.3 & \end{matrix}$~~

b) ~~$\begin{matrix} & 3.4 & \\ 0.2 & \times & 17 \\ & 17.2 & \end{matrix}$~~

c) ~~$\begin{matrix} & 2.6 & \\ 0.2 & \times & 13 \\ & 13.2 & \end{matrix}$~~

d) ~~$\begin{matrix} & 70 & \\ 20 & \times & 3.5 \\ & 23.5 & \end{matrix}$~~

9-92)

a)	x	3	8	1	9	-1	0
	y	12	4	0	4	-3	-8

yes, it is a function

b)	x	5	2	-1	0	-15	2
	y	2	0	-11	8	-25	1

not a function because there are two different outputs for when $x=2$.

9-93) Is $(2, 0)$ a point of intersection for $y = -2x + 4$ and $y = x - 2$

$$y = -2(2) + 4$$

$$y = -4 + 4$$

$$y = 0$$

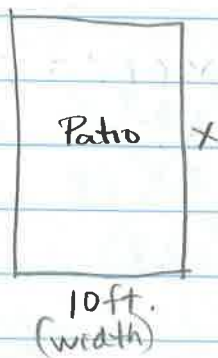
Yes!

$$y = 2 - 2$$

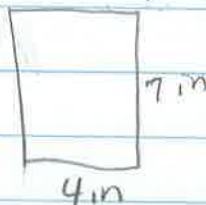
$$y = 0$$

yes!

9-94)



Drawing



$$a) \frac{10}{4} = \frac{x}{7}$$

$$70 = 4x$$

$$x = 17.5 \text{ feet}$$

$$b) A = bh \\ = 10 \cdot 17.5 \\ = 175 \text{ ft}^2$$

$$c) \frac{175}{125} = 1.4$$

need more than 1 can so you need (2) cans.

$$9-95) \quad \frac{20 \text{ pencils}}{12 \text{ oz.}} = \frac{50}{x}$$

$$\frac{600}{20} = \frac{20x}{20}$$

$$30 = x \quad 30 \text{ oz.}$$

$$9-96) \quad 6x + 4x + 10 = 90$$

$$10x + 10 = 90$$

a)

$$\begin{array}{r} -10 \quad -10 \\ \hline 10x = 80 \end{array}$$

$$\frac{10}{10} = \frac{80}{10}$$

$$x = 8^\circ$$

right $\angle = 90^\circ$

$$b) \quad 5x + 13 + 3x + 7 = 180$$

$$8x + 20 = 180$$

$$\begin{array}{r} -20 \quad -20 \\ \hline 8x = 160 \end{array}$$

$$\frac{8x}{8} = \frac{160}{8}$$

$$x = 20^\circ$$

straight angle
 $= 180^\circ$

$$c) \quad 3x + 5 + 2x + 18 + 2x + 17 = 180$$

$$7x + 40 = 180$$

$$\begin{array}{r} -40 \quad -40 \\ \hline 7x = 140 \end{array}$$

$$\frac{7x}{7} = \frac{140}{7}$$

$$x = 20^\circ$$

sum of a
triangle's
 180°

$$d) \quad x + 90 + 30 = 180^\circ$$

$$x + 120 = 180$$

$$\begin{array}{r} -120 \quad -120 \\ \hline x = 60^\circ \end{array}$$

sum of angles
in a triangle
is 180°

9-97)

$$SA = 34 \text{ units}^2 \quad \text{Volume} = 10 \text{ units}^3$$

9-98)

$$a) \quad A = \pi r^2$$

$$= 3.14 \cdot 8^2$$

$$= 3.14 \cdot 64$$

$$= 200.96 \text{ cm}^2$$

if you use π
button on
calculator
answer will
be 201.06 cm^2

$$b) \quad A = \pi r^2$$

$$A = 3.14 \cdot 30^2$$

$$A = 3.14 \cdot 900$$

$$A = 2826 \text{ cm}^2 \quad \text{or} \quad 2827.43 \text{ cm}^2$$

$$9-99) \quad a) \quad 49.63 = 4.963 \times 10^1$$

$$b) \quad 0.0000005 = 5.0 \times 10^{-7}$$

$$c) \quad 3,120,000,000 = 3.12 \times 10^9$$