

9.1.2

HWK

9-31)

a. radius

b. $A = \pi r^2$

$$A = 3.14 \cdot 10^2$$

$$A \approx 314 \text{ cm}^2$$

9-32)

a) $A = \pi r^2$

$$A = 3.14 \cdot (7.5)^2$$

$$A = 3.14 \cdot 56.25$$

$$A = 176.6 \text{ m}^2$$

$$C = \pi d$$

$$C = 3.14 \cdot 15$$

$$C = 47.1 \text{ m}$$

b) $A = \pi r^2$

$$A = 3.14 \cdot 9^2$$

$$A = 3.14 \cdot 81$$

$$A = 254.3 \text{ in}^2$$

$$C = \pi d$$

$$C = 3.14 \cdot 18$$

$$C = 56.52 \text{ in.}$$

c) $C = \pi d$

$$\frac{314}{3.14} = \frac{3.14 \cdot d}{3.14}$$

$$100 = d$$

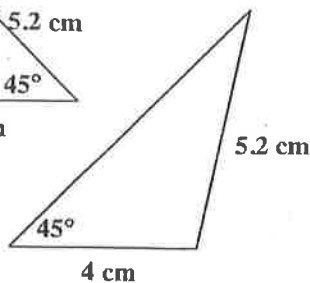
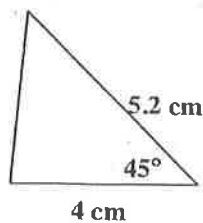
$$50 = r$$

$$A = \pi r^2$$

$$A = 3.14 \cdot 50^2$$

$$A = 7850 \text{ cm}^2$$

9-33)



Objects drawn to scale

9-34)

a) Comp. 22°

b) Supp. 144°

c) Several pairs of vertical angles

d) Comp. 30°

and supplementary angles
 $c = 114^\circ, e = 66^\circ, d = 114^\circ$

9-35)

$(130)(0.2) = 26$ $130 + 26 = 156$ pounds of fruit per tree

OR

$100\% + 20\% = 120\%$ $(1.2)(130) = 156$ pounds of fruit per tree

They will get 26 pounds more per tree.
 $(156 - 130 = 26)$

9-36) $1\frac{3}{4} \div 3$

$48 \div 16 = \underline{\underline{3}}$

$\frac{7}{4} \cdot \frac{1}{3} = \frac{7}{12}$ cup

9-37) $\frac{1}{4}$ in = 1 foot

$\frac{4\frac{1}{4}}{x} = \frac{\frac{1}{4} \text{ in}}{1 \text{ ft}}$

$\frac{2\frac{1}{2}}{x} = \frac{\frac{1}{4} \text{ in}}{1 \text{ ft}}$

$\frac{2.5}{125} = \frac{.25x}{.25}$

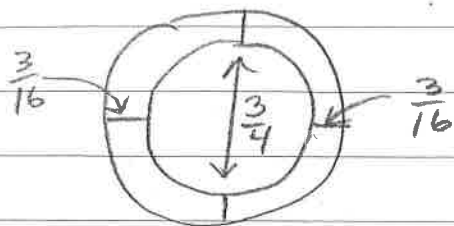
$\frac{4.25}{x} = \frac{.25}{1}$
 $\frac{4.25}{.25} = \frac{.25x}{.25}$

$\frac{2.5}{x} = \frac{.25}{1}$

10ft = x

$(10 \text{ ft} + x) 17 \text{ ft} = x$

$$9-38) \quad \frac{3}{4} + \frac{3}{16} = \frac{12}{16} + \frac{3}{16} + \frac{3}{16} = \frac{18}{16} = 1\frac{2}{16} = 1\frac{1}{8} \text{ in}$$



$$9-39) \quad x + 35 = 4x + 8$$

trial	$x + 35$	$4x + 8$	$(x + 35) = (4x + 8)$
6	$6 + 35 = 41$	$4(6) + 8 = 32$	NO
8	$8 + 35 = 43$	$4(8) + 8 = 40$	NO
9	$9 + 35 = 44$	$4(9) + 8 = 44$	Yes <u>$x = 9$</u>

$$\underline{\underline{\text{OR}}} \quad x + 35 = 4x + 8$$

$$\begin{array}{r} -x \quad \quad -x \\ \hline 35 = 3x + 8 \end{array}$$

$$\begin{array}{r} -8 \quad \quad -8 \\ \hline 27 = 3x \end{array}$$

$$\frac{27}{3} = \frac{3x}{3}$$

$$9 = x$$

$$9-40) \quad a = b = d \\ c = e$$

$$9-41) \quad a) P(\text{red}) = \frac{4}{16} = \frac{1}{4}$$

$$b) P(\text{red or green}) = \frac{7}{16} + \frac{4}{16} = \frac{11}{16}$$

$$c) P(\text{orange}) = 0$$