

## Part II Solutions

#1.  $A = bh$  replace the values you know

$$\frac{125}{15} = \frac{15h}{15} \quad \text{then solve}$$

$$8.3\text{m}$$

#2.  $P = 2l + 2w$   
 $32 = 2l + 2(6)$   
 $32 = 2l + 12$   
 $\frac{-12}{-12}$

$$\frac{20}{2} = \frac{2l}{2}$$

$$10 = l$$

$$10\text{ft} = l$$

#3.  $A = \frac{1}{2}bh$   
 $156 = \frac{1}{2}b(13)$   
 $\frac{156}{6.5} = \frac{6.5b}{6.5}$

~~24m~~ 24m  
~~24m~~

#4.  $C = \pi d$

$$\frac{40.82}{3.14} = \frac{3.14d}{3.14}$$

$$13 = d \quad 13\text{cm}$$

$$6.5 = r \quad 6.5\text{cm}$$

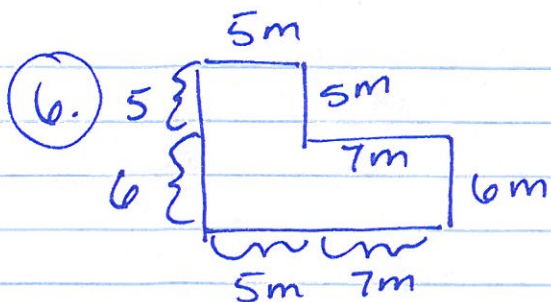
#5.  $A = \pi r^2$

$$\frac{19.625}{3.14} = \frac{3.14r^2}{3.14}$$

$$\sqrt{6.25} = \sqrt{r^2}$$

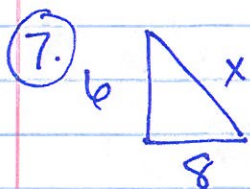
$$2.5\text{ft} = r$$

$$5\text{ft} = d$$



$$\begin{aligned} \text{Area} &= 5(5) + 12(6) \\ &= 25 + 72 \\ &= 97 \text{ m}^2 \end{aligned}$$

$$\begin{aligned} P &= 5 + 5 + 7 + 6 + 12 + 11 \\ &= 46 \text{ m} \end{aligned}$$



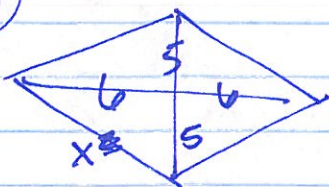
use the pyth. theorem to

$$\begin{aligned} 6^2 + 8^2 &= x^2 \\ 36 + 64 &= x^2 \\ \sqrt{100} &= \sqrt{x^2} \\ 10 &= x \end{aligned}$$

$$\begin{aligned} A &= \frac{1}{2}(6)(8) \\ &= 24 \text{ ft}^2 \end{aligned}$$

$$\begin{aligned} P &= 6 + 8 + 10 \\ &= 24 \text{ ft} \end{aligned}$$

8.



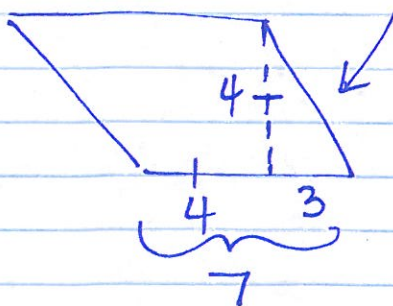
use pyth. theorem to find the missing side. 4  $\Delta$ 's

$$\begin{aligned} 5^2 + 6^2 &= x^2 \\ 25 + 36 &= x^2 \\ \sqrt{61} &= \sqrt{x^2} \\ 7.8 &= x \end{aligned}$$

$$\begin{aligned} A &= 4 \left( \frac{1}{2}(6)(5) \right) \\ &= 60 \text{ units}^2 \end{aligned}$$

$$\begin{aligned} P &= 7.8 + 7.8 + 7.8 + 7.8 \\ &= 31.2 \text{ units} \end{aligned}$$

9.



$$\begin{aligned} 4^2 + 3^2 &= c^2 \\ 16 + 9 &= c^2 \\ c &= 5 \end{aligned}$$

$$\begin{aligned} A &= 4(3+4) \\ &= 28 \text{ units}^2 \end{aligned}$$

$$\begin{aligned} P &= 5 + 5 + 7 + 7 \\ &= 24 \text{ units} \end{aligned}$$