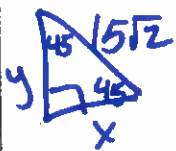


# 1



$$\boxed{\begin{matrix} x=15 \\ y=15 \end{matrix}}$$

# 2

$$\boxed{x=5\sqrt{2}}$$

# 3



$$y = \sqrt{5} \cdot \sqrt{2}$$

$$\boxed{y = \sqrt{10}}$$

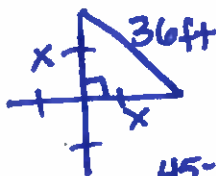
# 4

$$\begin{matrix} 45-45-90 \\ x \ x \ x\sqrt{2} \\ 10\sqrt{2} \ 10\sqrt{2} \ 20 \\ 10\sqrt{2} \end{matrix}$$



$$\boxed{14.1\text{cm}}$$

# 5



$$45-45-90 \\ x \ x \ x\sqrt{2}$$

$$18\sqrt{2} \ 18\sqrt{2} \ 36$$

$$18\sqrt{2} = \boxed{25.5\text{ft}}$$

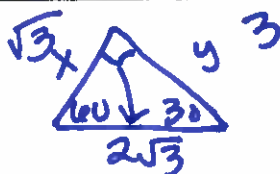
# 6



$$\begin{matrix} 30-60-90 \\ x \ x\sqrt{3} \ 2x \\ 20 \rightarrow 20\sqrt{3} \ 40 \end{matrix}$$

$$\boxed{\begin{matrix} x=20 \\ y=20\sqrt{3} \end{matrix}}$$

# 7



$$\begin{matrix} 30-60-90 \\ x \ x\sqrt{3} \ 2x \\ 1\sqrt{3} \rightarrow 3 \ 2\sqrt{3} \end{matrix}$$

$$\boxed{\begin{matrix} x=\sqrt{3} \\ y=3 \end{matrix}}$$

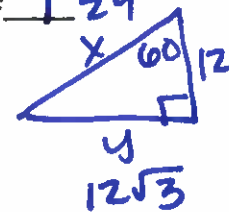
# 8



$$\begin{matrix} 30-60-90 \\ x \ x\sqrt{3} \ 2x \\ 5 \rightarrow 5\sqrt{3} \ 10 \end{matrix}$$

$$\boxed{\begin{matrix} x=5 \\ y=5\sqrt{3} \end{matrix}}$$

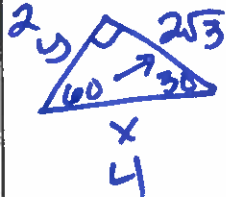
# 9



$$\begin{matrix} 30-60-90 \\ x \ x\sqrt{3} \ 2x \\ 12 \ 12\sqrt{3} \ 24 \end{matrix}$$

$$\boxed{\begin{matrix} x=24 \\ y=12\sqrt{3} \end{matrix}}$$

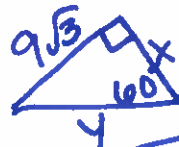
# 10



$$\begin{matrix} 30-60-90 \\ x \ x\sqrt{3} \ 2x \\ 2 \ 2\sqrt{3} \ 4 \end{matrix}$$

$$\boxed{\begin{matrix} x=4 \\ y=2 \end{matrix}}$$

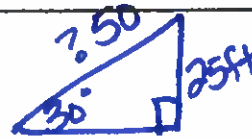
# 11



$$\begin{matrix} 30-60-90 \\ x \ x\sqrt{3} \ 2x \\ 9 \ 9\sqrt{3} \ 18 \end{matrix}$$

$$\boxed{\begin{matrix} x=9 \\ y=18 \end{matrix}}$$

# 12



$$\begin{matrix} 30-60-90 \\ x \ x\sqrt{3} \ 2x \\ 25 \ 25\sqrt{3} \ 50 \end{matrix}$$

$$\boxed{50\text{ft}}$$

# 13

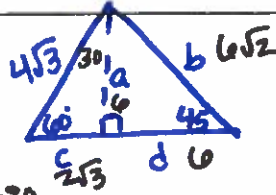


45-45-90  
x x x√2  
7 7 7√2

30-60-90  
x x√3 2x  
7 7√3 14

a=7    b=14  
c=7    d=7√3

# 14

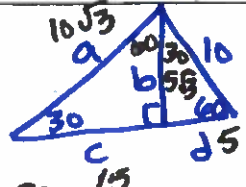


30-60-90  
x x√3 2x  
2√3 → 6 4√3

45-45-90  
x x x√2  
6 6 6√2

c=2√3    b=6√2  
a=6    d=6

# 15

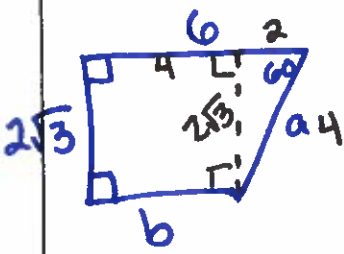


30-60-90  
x x√3 2x  
5√3 15 10√3

30-60-90  
x x√3 2x  
5 → 5√3 10

a=10√3    b=5√3  
c=15    d=5

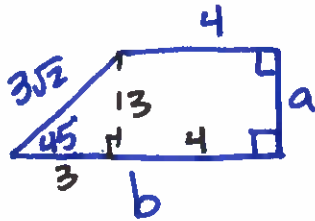
# 16



a=4  
b=4

30-60-90  
x x√3 2x  
2 2√3 4

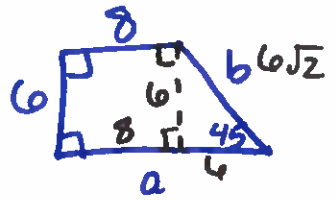
# 17



45-45-90  
x x x√2  
3 3 3√2

a=3  
b=7

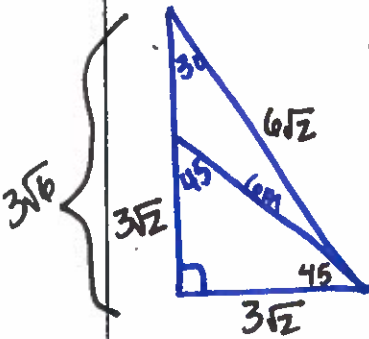
# 18



45-45-90  
x x x√2  
6 6 6√2

a=14  
b=6√2

# 21



45-45-90  
x x x√2  
3√2 3√2 6

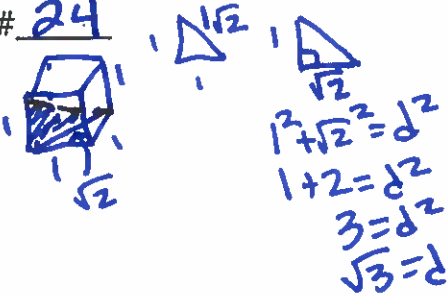
30-60-90  
x x√3 2x  
3√2 3√6 6√2

# 21

a)  $6\sqrt{2} \text{ m} = 8.5 \text{ m}$

b)  $3\sqrt{6} - 3\sqrt{2} = 3.1 \text{ m}$

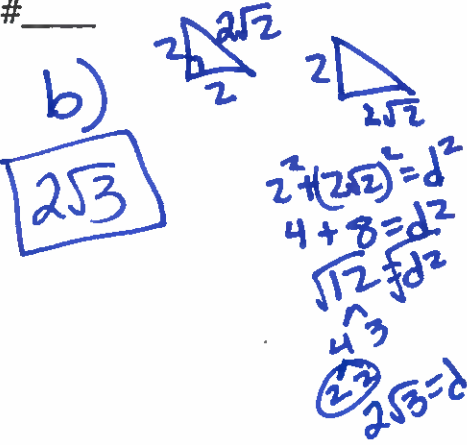
# 24



a)  $\sqrt{3}$

$\sqrt{2}^2 + \sqrt{2}^2 = d^2$   
 $1 + 2 = d^2$   
 $3 = d^2$   
 $\sqrt{3} = d$

#



b)  $2\sqrt{3}$

$2^2 + (2\sqrt{2})^2 = d^2$   
 $4 + 8 = d^2$   
 $\sqrt{12} = \sqrt{d^2}$   
 $2\sqrt{3} = d$

#

c)  $5\sqrt{3}$   
↑  
letter s