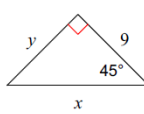
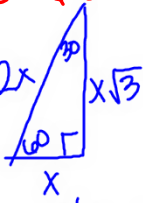
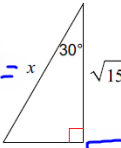


## Questions on Lesson 3.4?

We will be taking our content mastery quiz soon!

## Questions on Special Right Triangles Worksheet?

Special Right Triangles.pdf - Adobe Reader

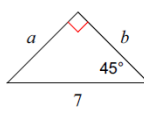
13)   $30^\circ-60^\circ-90^\circ \Delta$  14)   $2\sqrt{3} = x$    $y = \frac{\sqrt{15}}{\sqrt{3}} = \frac{\sqrt{15}}{\sqrt{3}} = \sqrt{5}$


longer leg  $\rightarrow$  shorter leg  
= by  $\sqrt{3}$

shorter leg  $\rightarrow$  hypotenuse  
• by 2

hypotenuse  $\rightarrow$  shorter leg  
= by 2

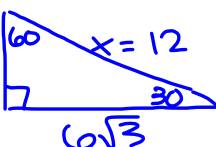
shorter leg  $\rightarrow$  longer leg  
• by  $\sqrt{3}$

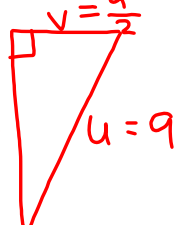
15) 

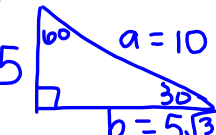
18)   $\cdot 2 = 4$   
 $1 = 4$

$$\frac{\sqrt{3}}{2} = \frac{\sqrt{3}}{2} \div \frac{\sqrt{3}}{1} = \frac{\sqrt{3}}{2} \cdot \frac{1}{\sqrt{3}} = \frac{\sqrt{3} \cdot 1}{2 \cdot \sqrt{3}} = \frac{1}{2}$$

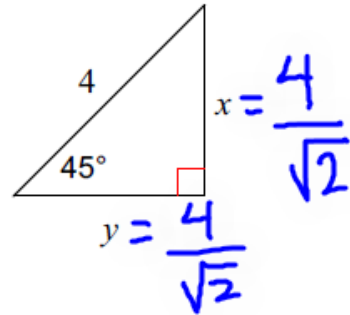
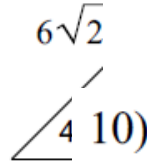
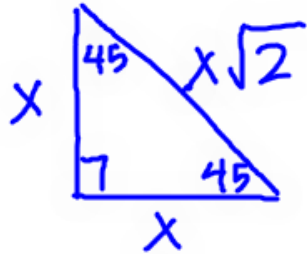
$V = \frac{1}{2}$

19)   $y = \frac{6\sqrt{3}}{\sqrt{3}} = 6$   
 $x = 6 \cdot 2 = 12$

16)   $v = \frac{9\sqrt{3}}{2}$   
 $\frac{9\sqrt{3}}{2} = \frac{9\sqrt{3}}{2} \div \frac{\sqrt{3}}{1} = \frac{9\sqrt{3}}{2} \cdot \frac{1}{\sqrt{3}} = \frac{9\sqrt{3} \cdot 1}{2 \cdot \sqrt{3}} = \frac{9}{2}$   
 $u = \frac{9}{2} \cdot \frac{2}{1} = 9$

20)   $a = 5 \cdot 2 = 10$   
 $b = 5\sqrt{3}$

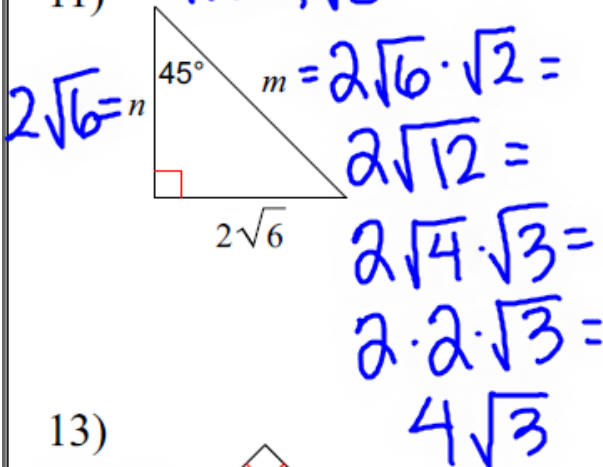
45°-45°-90° Δ 8)



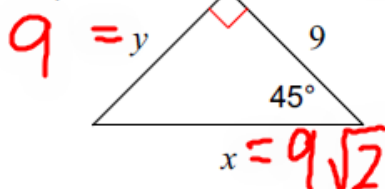
leg → hypotenuse  
 • by  $\sqrt{2}$

hypotenuse → leg  
 ÷ by  $\sqrt{2}$

11)  $m = 4\sqrt{3}$



13)



What does it mean for a radical to be in "simplest form?"

**Radicand:**  $\sqrt{\quad}$

-There are no perfect square factors in the radicand.

-There are no radicands in the denominator of a fraction.

**Perfect squares:**

1, 4, 16, 25, 36, 49, 64, 81, 100, 121, 144, ...

$$\frac{3}{\sqrt{7}} \cdot \frac{\sqrt{7}}{\sqrt{7}} = \frac{3\sqrt{7}}{\sqrt{7 \cdot 7}} = \frac{3\sqrt{7}}{\sqrt{49}} = \frac{3\sqrt{7}}{7}$$

$$\frac{8}{\sqrt{3}} \cdot \frac{\sqrt{3}}{\sqrt{3}} = \frac{8\sqrt{3}}{\sqrt{9}} = \frac{8\sqrt{3}}{3}$$

$$\frac{1}{2} \cdot \frac{2}{4} = \frac{2}{4}$$

↓  
1

**Simplify with your group.**

$$\sqrt{810}$$

$$\sqrt{112}$$

$$\sqrt{27}$$

$$\sqrt{800}$$

**Practice on a piece of paper.**

a.  $\sqrt{96}$

b.  $\sqrt{200}$

c.  $\sqrt{392}$

d.  $\sqrt{175}$

Simplify with your group.

$$\frac{4}{\sqrt{5}} \cdot \frac{\sqrt{5}}{\sqrt{5}} = \frac{4\sqrt{5}}{5}$$

$$\frac{2}{\sqrt{3}}$$

$$\frac{14}{\sqrt{2}}$$

$$\frac{12}{\sqrt{6}}$$

Practice on a piece of paper.

a.  $\frac{1}{\sqrt{2}}$

b.  $\frac{8}{\sqrt{7}}$

c.  $\frac{4}{\sqrt{6}}$

d.  $\frac{4}{\sqrt{10}}$



## Practice on a piece of paper.

