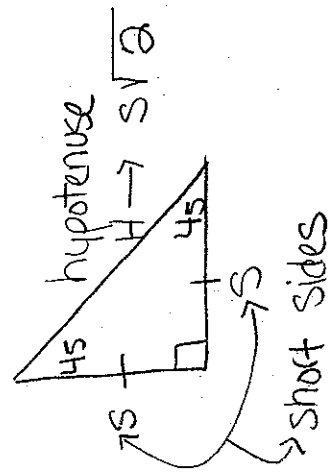


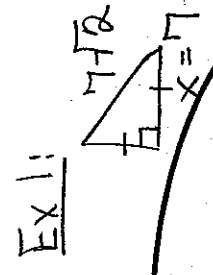
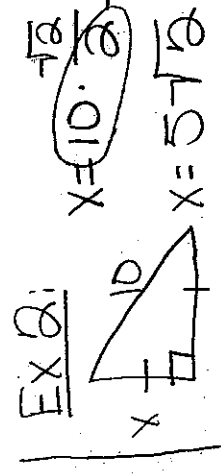
Name: Notes 1-30-14

Diagram

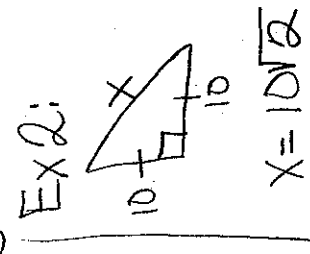
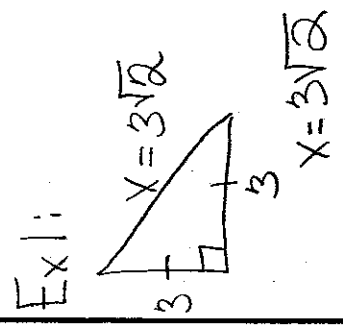


45-45-90  
Right Triangles

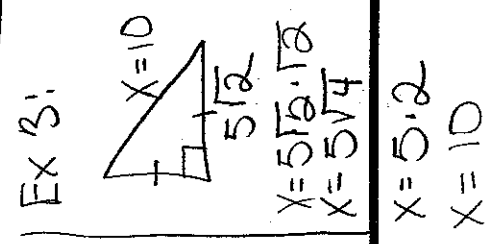
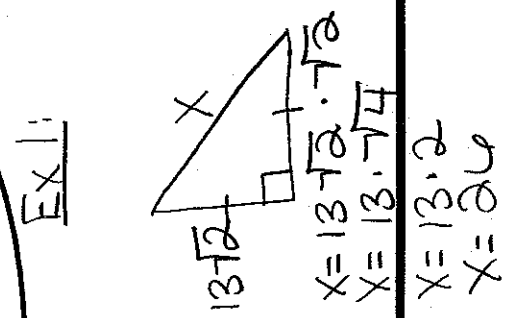
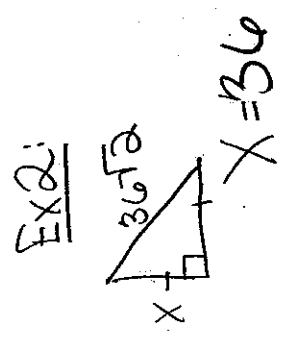
To find the short side, multiply short side by  $\frac{\sqrt{2}}{2}$  or use the trick:  
 $s \rightarrow \frac{s}{\sqrt{2}}$



Hypotenuse - to find the hypotenuse, multiply the short side by  $\sqrt{2}$ .

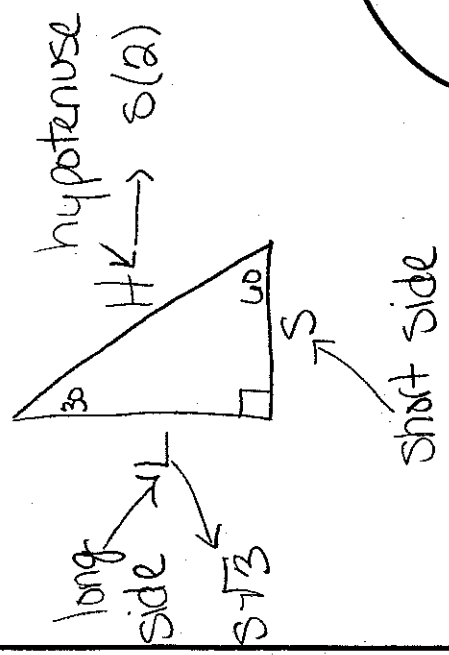


Example



divide the 2 #'s.

Diagram



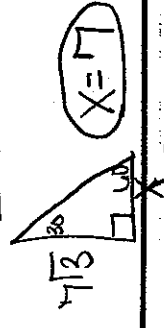
30-60-90  
Right Triangles



To find the short side divide the hypotenuse by 2.  
\* To find the short side, multiply the long side by  $\frac{1}{\sqrt{3}}$  or use the trick

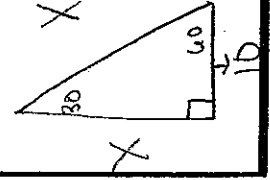
Ex 1:  $x = \frac{30}{2}$   
 $x = 15$

Ex 2:



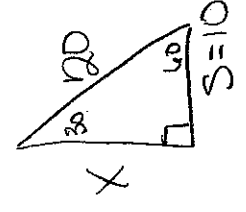
Long Side \* First find the short side \* Second, multiply by  $\sqrt{3}$

Ex 1:



$x = 10\sqrt{3}$

Ex 2:

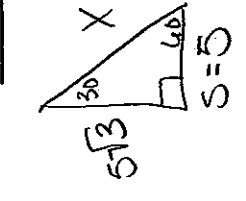


$s = \frac{20}{2} = 10$

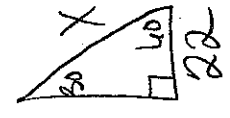
$x = 10\sqrt{3}$

Hypotenuse  
\* First, find the short side \* Second multiply by 2

Ex 2:



$x = 22(2)$   
 $x = 44$



$x = 10$   $x = 5(2)$   
 $x = 10$