

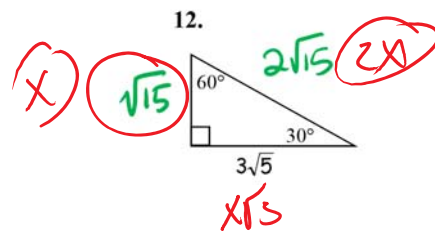
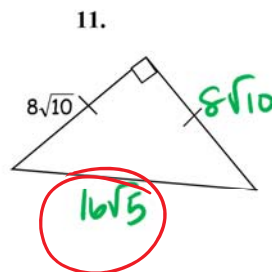
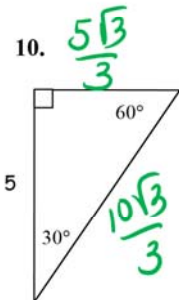
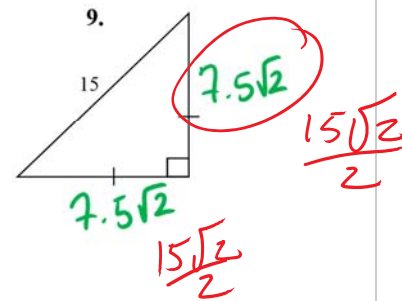
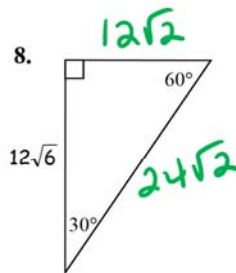
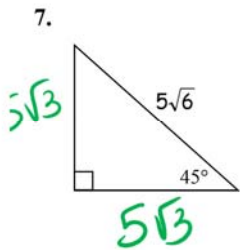
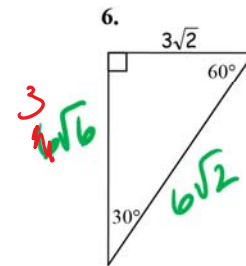
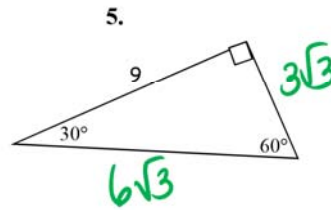
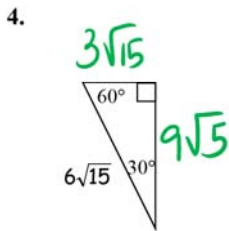
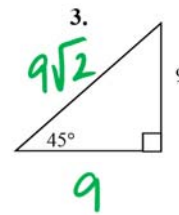
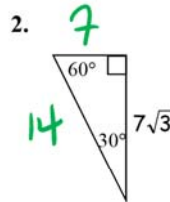
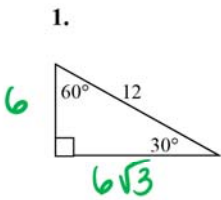
# Practice Key

Wednesday, February 19, 2014 2:44 PM

Geometry Honors  
9.7 Practice

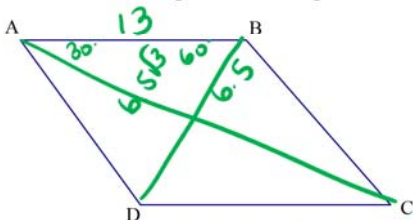
Name:

**Examples of Special Right Triangles:** In each of the following triangles, find the lengths of the two remaining sides.



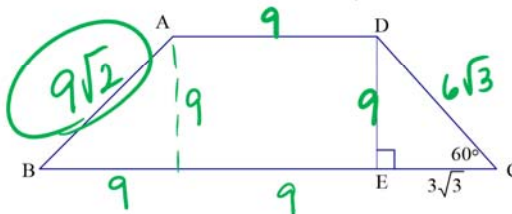
$8\sqrt{10} \cdot \frac{1}{2}$   
 $8\sqrt{10}$   
 $\frac{1}{2} \cdot 5$

13. The perimeter of rhombus ABCD is 52 and  $m\angle ABC$  is  $120^\circ$ . Find the lengths of the diagonals.



Diagonal 1 = 13  
Diagonal 2 =  $13\sqrt{3}$

14. Given ABCD is a trapezoid,  $AD = 9$  and  $BC = 18 + 3\sqrt{3}$ , find AB.



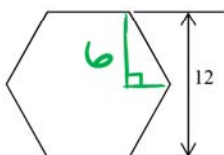
15. Find the perimeter of a square with a diagonal length of 4.



$x\sqrt{2} = 4$   
 $x = \frac{4\sqrt{2}}{2} = 2\sqrt{2}$

perimeter =  $8\sqrt{2}$

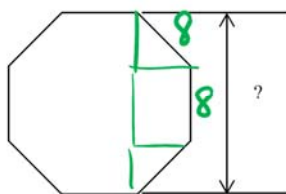
16. Find the length of one side of a regular hexagon if its span is 12.



$x\sqrt{3} = 6$   
 $x = \frac{6\sqrt{3}}{3} = 2\sqrt{3}$

Side length =  $4\sqrt{3}$

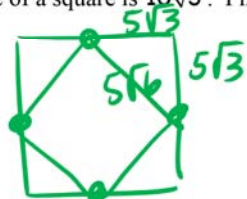
17. If a regular octagon has a perimeter of 64, what is the length of its span?



$x\sqrt{2} = 8$   
 $x = \frac{8\sqrt{2}}{2} = 4\sqrt{2}$

Span =  $4\sqrt{2} + 8 + 4\sqrt{2}$   
 $= 8 + 8\sqrt{2}$

18. Each side of a square is  $10\sqrt{3}$ . Find the perimeter of the figure found by joining the midpoints of each side.



perimeter =  $20\sqrt{6}$