Geometry – DAY 3 Name: _____

Unit Circle Coordinates Date: _____

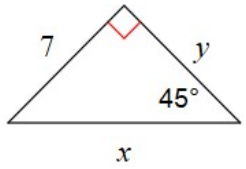
Warm-Up:

Convert degrees to radians or radians to degrees!

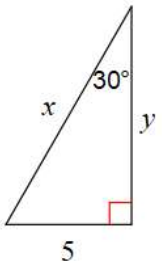
1. 135°
2. $\frac{5\pi}{3}$
3. $\frac{8\pi}{5}$
4. 196°

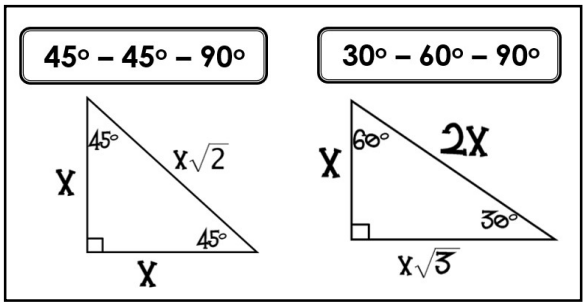
Special Right Triangles!

5.



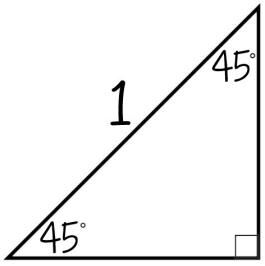
6.



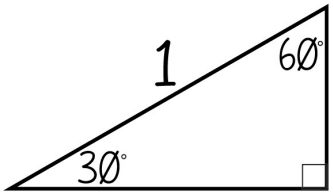


Now solve for the missing sides when there is a hypotenuse of 1!

7.



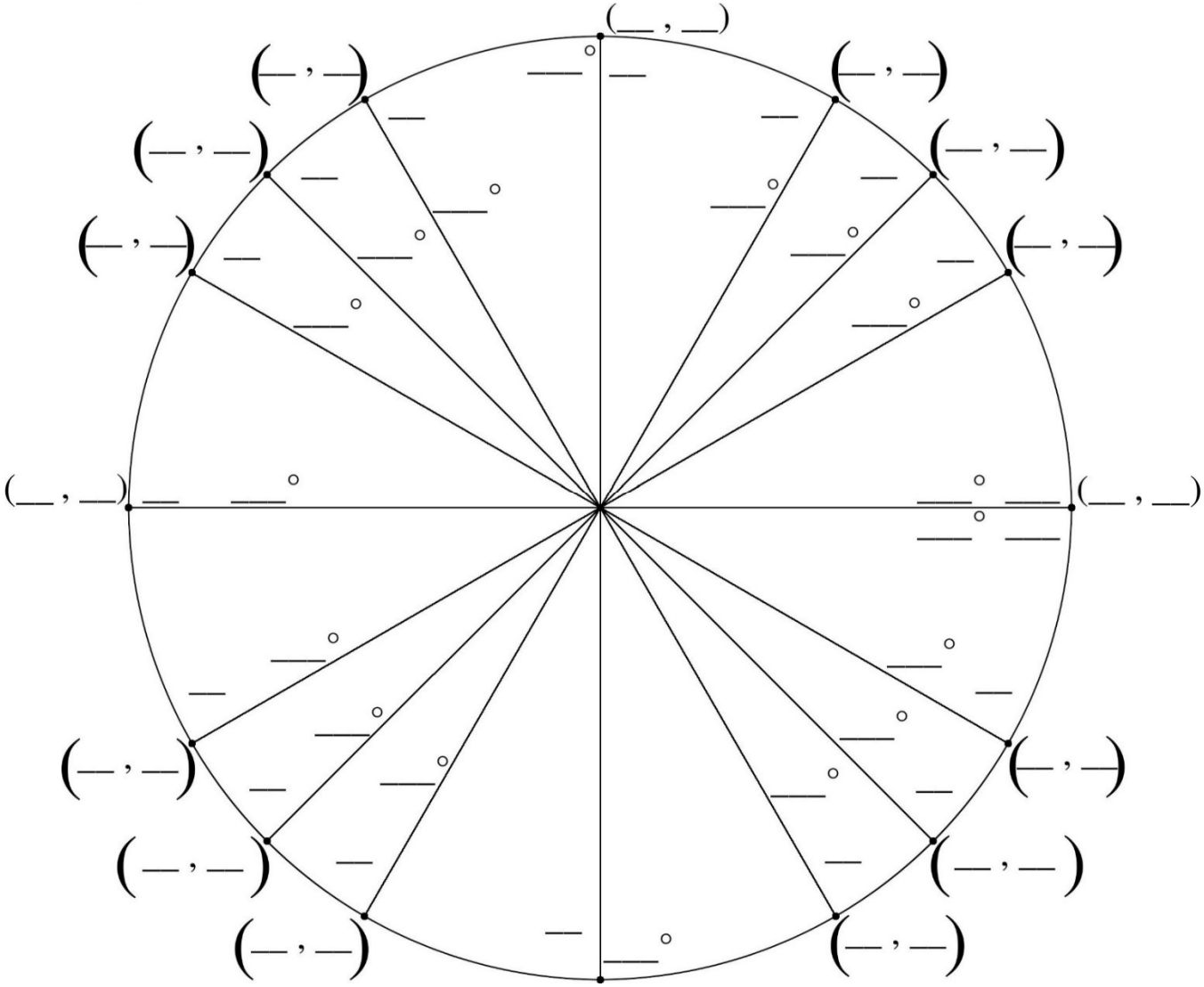
8.



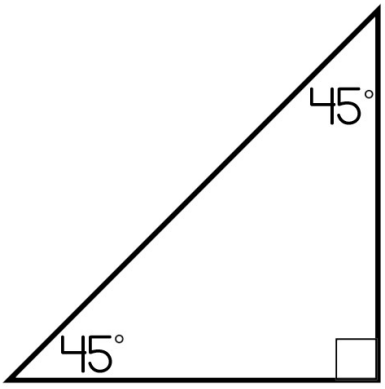
Now, let's find the coordinates of the unit circle!!!

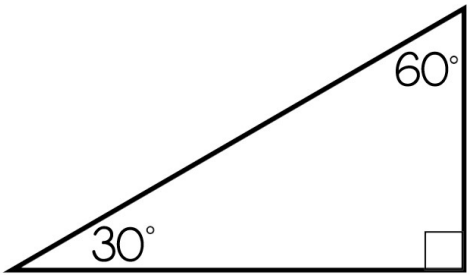
1. First fill in all the degrees and radians on the unit circle.
2. Cut out your 3 triangles! Two of them are 30-60-90 right triangles and one is a 45-45-90 right triangle.
3. Label the side lengths on all 3 triangles on both sides – the front AND the back!
4. Use the triangles to find the coordinates on the Unit Circle.

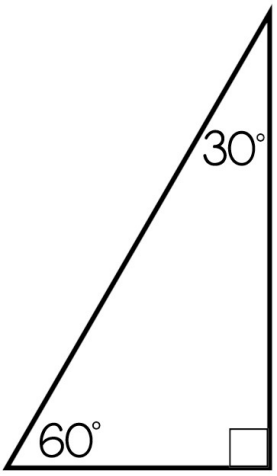
THE UNIT CIRCLE



Cut out all three triangles. Solve for each side of the triangle when the hypotenuse is equal to 1 and write the lengths on the triangle. Make sure to write everything on the BACK of the triangles too!







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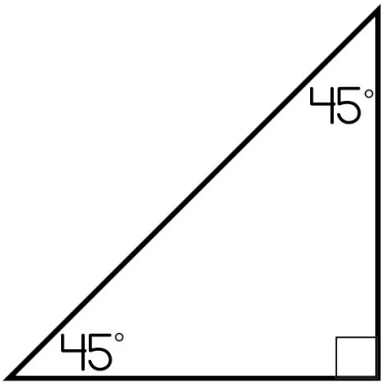

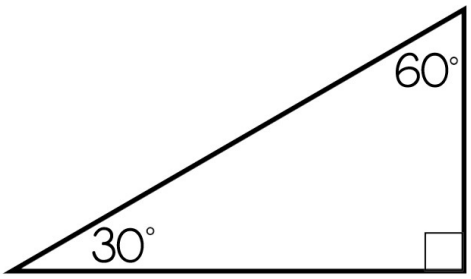

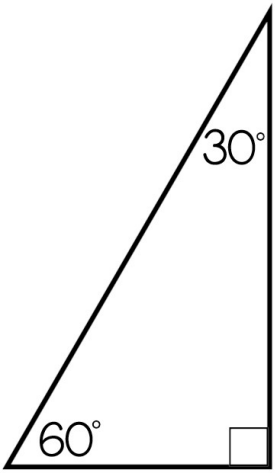

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