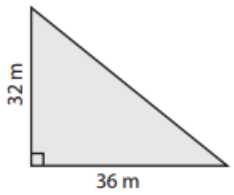
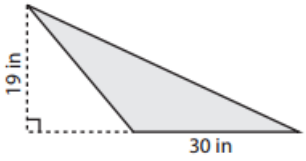
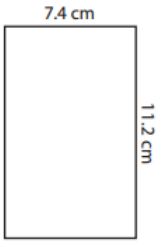
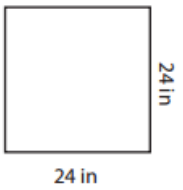
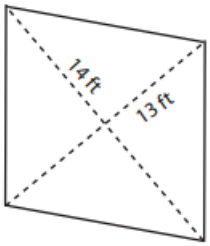
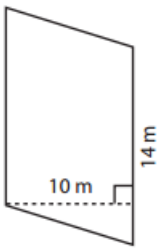
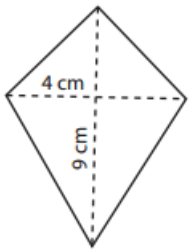
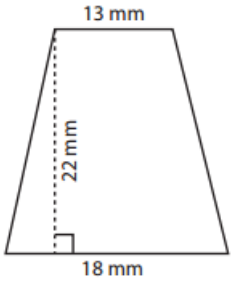
Name _____ Period _____

Algebra 8: Geometry Review

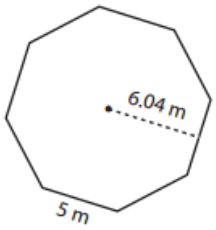
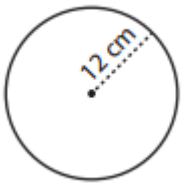
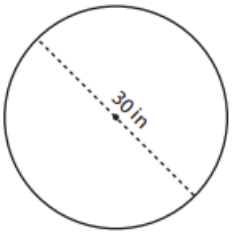
Finding Area: Find the area of each figure.

Shape Name	Figure	Formula	Calculations	Area
Right Triangle				
Acute Triangle				
Obtuse Triangle				
Rectangle				

Name _____ Period _____

Square				
Rhombus *(half of the length of each diagonal is given)*				
Parallelogram				
Kite *(the entire length of each diagonal is given)*				
Trapezoid				

Name _____ Period _____

Regular Polygon				
Circle with Radius *(round your answer to the nearest hundredth)*				
Circle with Diameter *(round your answer to the nearest hundredth)*				

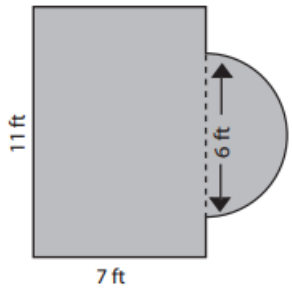
<u>Sketching Figures with Given Areas</u>: Draw each figure, then label its dimensions with values that will give you the specific area.

Given Information	Sketch	Formula	Proof
Square $A = 289\ ft^2$			

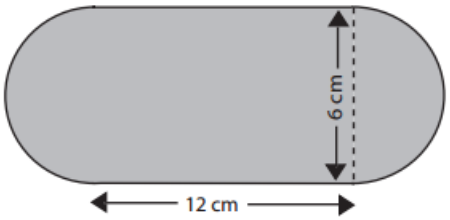
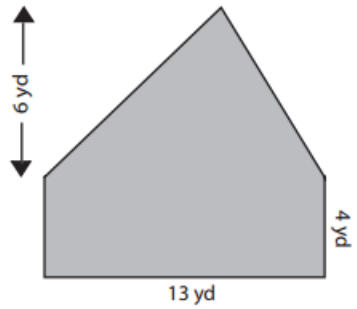
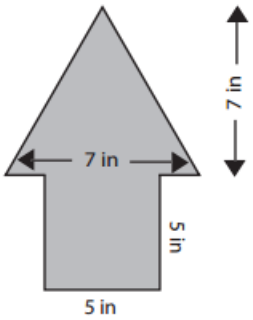
Name _____ Period _____

Right Triangle $A = \ 15\ m^2$			
Circle $A \approx 254.34\ yd^2$			
Regular Polygon $A = \ 50\ cm^2$			

Finding the Area of Compound Figures: A compound figure is a made up of more than one common shape. Use what you know about finding the area of polygons and circles to help you find the area of each compound shape. Round your answers to the nearest hundredth if necessary.

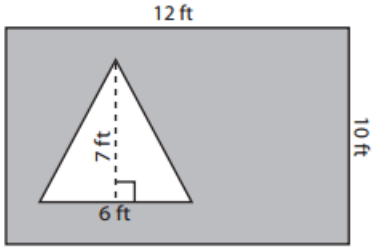
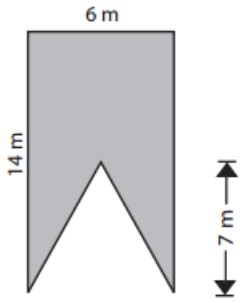
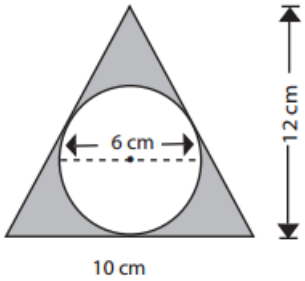
Compound Figure	Shape 1	Shape 2	Total Area
	Shape Name: Area Formula:	Shape Name: Area Formula:	Calculations
	Calculations	Calculations	Final Answer

Name _____ Period _____

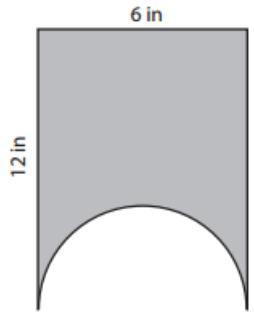
	Shape Name: Area Formula:	Shape Name: Area Formula:	Calculations
	Calculations	Calculations	Final Answer
	Shape Name: Area Formula:	Shape Name: Area Formula:	Calculations
	Calculations	Calculations	Final Answer
	Shape Name: Area Formula:	Shape Name: Area Formula:	Calculations
	Calculations	Calculations	Final Answer

Name _____ Period _____

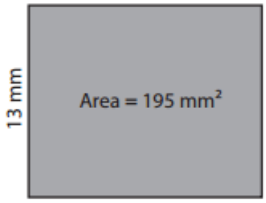
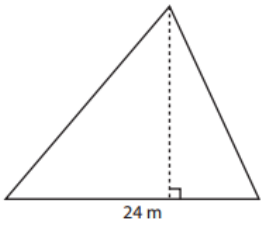
Finding the Area of Compound Figures: A compound figure is a made up of more than one common shape. Use what you know about finding the area of polygons and circles to help you find the area of each compound shape. Find the area of the shaded region. Round your answers to the nearest hundredth if necessary.

Compound Figure	Shape 1	Shape 2	Total Area
	Shape Name: Area Formula:	Shape Name: Area Formula:	Calculations
	Calculations	Calculations	Final Answer
	Shape Name: Area Formula:	Shape Name: Area Formula:	Calculations
	Calculations	Calculations	Final Answer
	Shape Name: Area Formula:	Shape Name: Area Formula:	Calculations
	Calculations	Calculations	Final Answer

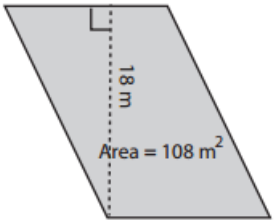
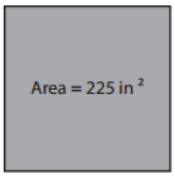
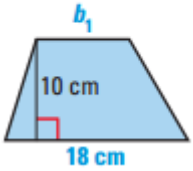
Name _____ Period _____

	Shape Name: Area Formula:	Shape Name: Area Formula:	Calculations
	Calculations	Calculations	Final Answer

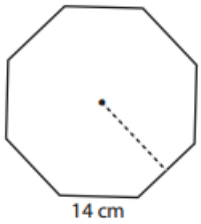
<u>Working Backwards with Area Formulas</u>: Area formulas can be used to calculate area, but they can also be used to find other variables in the formulas. Use the given areas and you equation solving skills to calculate the missing values.

Shape Name	Figure/ Formula	Calculations	Value of Variable
Rectangle *Find the base.*	 **Formula**		
Triangle *Find the base.*	 Area = 252 m **Formula**		

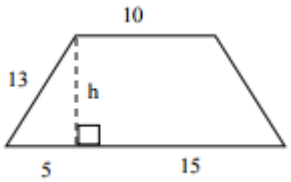
Name _____ Period _____

Circle *Find the radius.*	 **Formula**		
Parallelogram *Find the height.*	 **Formula**		
Square *Find the side.*	 **Formula**		
Trapezoid *Find the height.*	$A = 135 \text{ cm}^2$  **Formula**		

Name _____ Period _____

Regular Polygon *Find the apothem.*	 Area = 946.4 cm² **Formula**		

<u>Pythagorean Theorem and Area:</u> When you do not have all of the information you need to calculate the area of a figure, the Pythagorean Theorem can be a useful tool. Use the Pythagorean Theorem to help you find the areas of the trapezoids.

Figure/ Formula	Find the Height	Calculations	Area
 **Formula**			