## Classwork Monday 3/25/2019

On a paper to turn in. Due Tuesday 3/26/2019 at the end of class

1. A regular nonagon has side lengths of 5.5 cm . Calculate the radius required to construct this shape using the circle method of construction. Use the radius you calculated to construct the regular nonagon and confirm that your calculation was correct.
2. A circle with a radius of 7 cm is used to construct a regular dodecagon. Calculate the side length of the dodecagon and use the circle construction method to construct the shape and confirm your calculation is correct.
3. Construct a square that has an area of $81 \mathrm{~cm}^{2}$. What are the side lengths of the square? What is the radius of the circle needed to construct the square using the circle construction method?
4. Draw a triangle that has an area of $50 \mathrm{~cm}^{2}$. Explain how you picked your dimensions.
5. What is the formula for the area of a parallelogram? Draw a picture and explain how this formula relates to the formula for the area of a rectangle.

Be sure to show all your calculations and answer questions in complete sentences.
Find the area of each regular polygon.

## 6. Heptagon


7. Octagon

8. Hexagon


