Practice – Part 4

Instructions: Answer each of the following practice questions on a separate piece of paper. Step by step solutions are provided under the Solutions tab. You will learn the material more thoroughly if you complete the questions before checking the answers under the Solutions tab in Moodle.

1.   What is the measure of each angle in a 25-sided regular polygon to one decimal?

2.   Complete the table below. Sketch the first four polygons listed in the table. Recall that regular polygons have all the same angle measure as well as the same side lengths.

Regular Polygon	Sketch of Polygon	Number of Sides	Sum of Interior Angles of the Polygon (in degrees) (S)	Angle Measure (in degrees, accurate to one decimal place) (M)
Pentagon				
Hexagon				
Heptagon				
Octagon				
Nonagon				
Decagon				

3.   Use the polygon properties to answer the following.

    a.   How does the interior angle measure change as the number of sides increases?

    b.   As the number of sides increase, what is happening to the shape of the polygon?