Name_____ Date_____

3.3 – Angles in a Polygon

Find the sum of the interior angles of the polygon. (Finding the number triangles may help). Show all work.

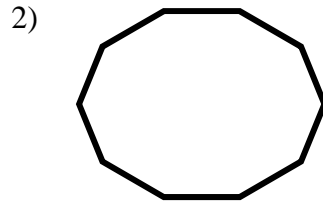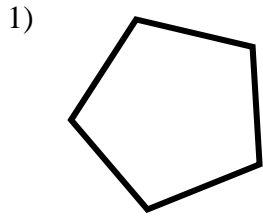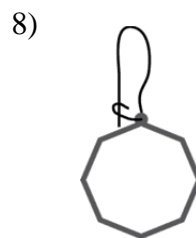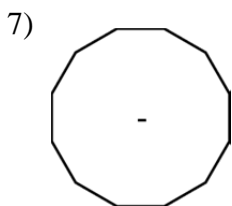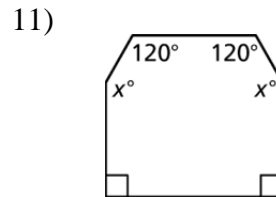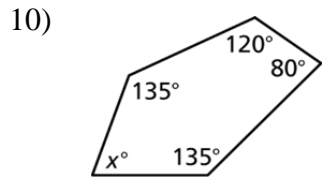1)

2)

3)

4)

5)

6)
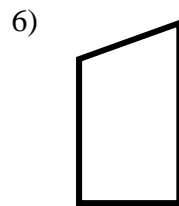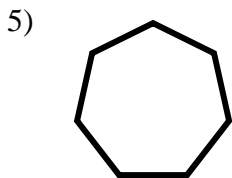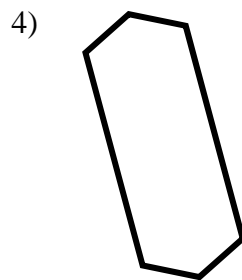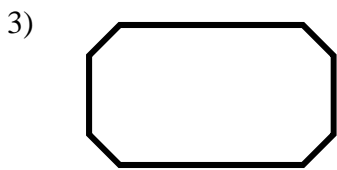
Find the measure of just ONE interior angle of the **regular** polygon. SHOW ALL WORK.

7)

8)

9) In pottery class, you are making a pot that is shaped as a regular hexagon. What is the measure of each angle in the regular hexagon

Find the measures of the interior angles. Show all algebraic work.

10)

120°
80°
135°
$x°$ 135°

11)

120°   120°
$x°$ $x°$

Find the measures of the exterior angles. Show all algebraic work.

12)

140°
$x°$
110°

13)

85°
93°
107°
$w°$

14)

$n°$
$n°$
$n°$
$n°$