

Practice Worksheet for Lesson 3-5

Name:

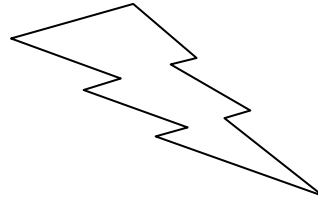
Mailbox #:

Decide if each figure is a convex polygon, a nonconvex polygon, or neither.

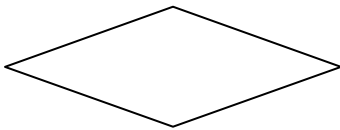
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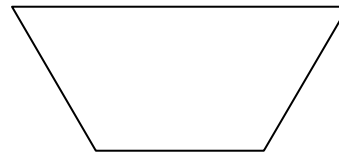
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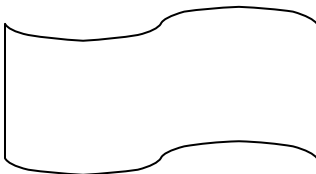
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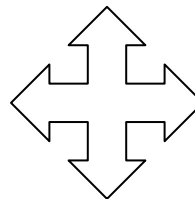
4)



5)



6)

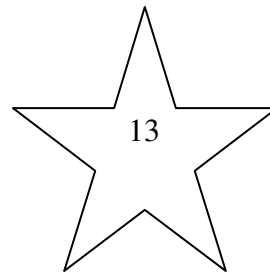
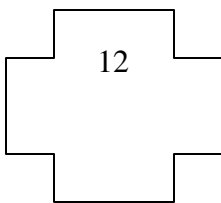
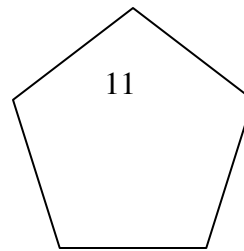
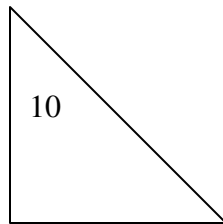
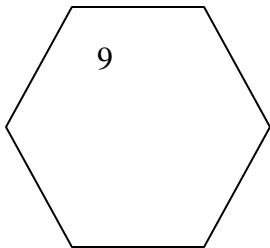
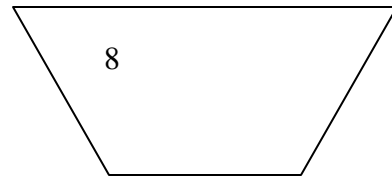
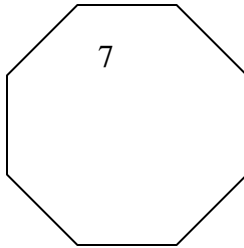
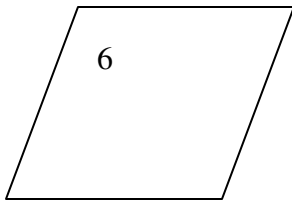
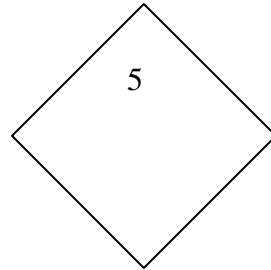
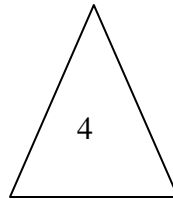
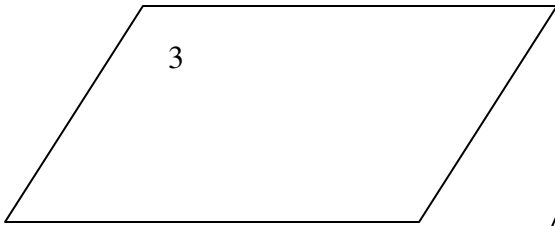
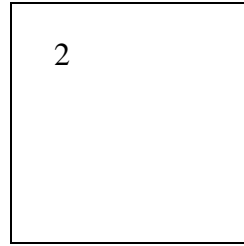
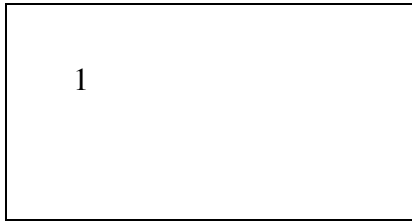


7) A polygon has 102 sides. What is the interior sum? The exterior sum?

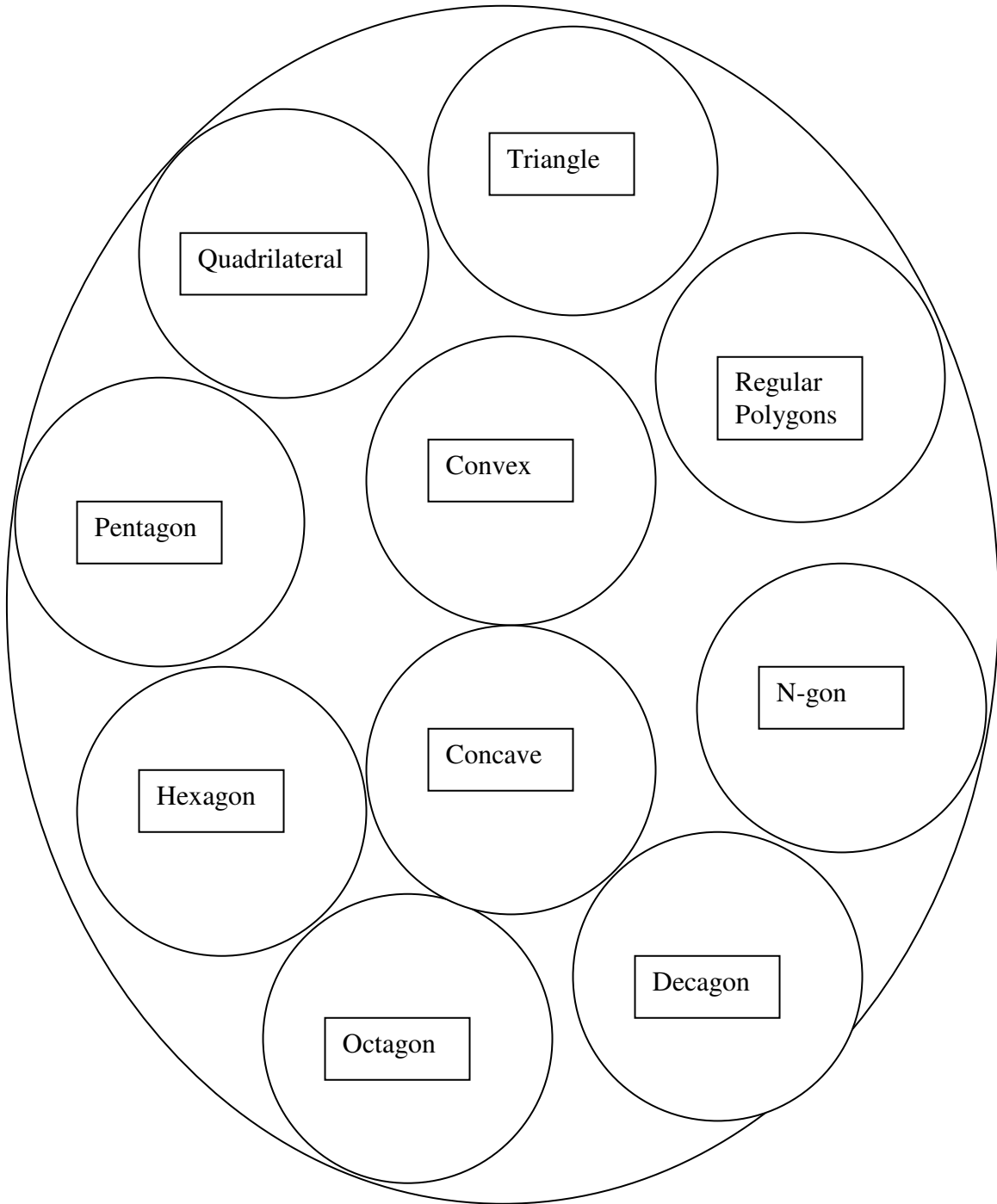
8) Complete the table for regular polygons.

Number of sides	<b>9</b>	<b>15</b>				
Measure of ext. $\angle$			<b>10</b>	<b>20</b>		
Measure of int. $\angle$					<b>179</b>	<b>90</b>

9) Four of the angles of a pentagon have the measures 40, 80, 115, and 165. Find the measure of the fifth angle.



Put the numbers of the shapes from the previous page in the appropriate circle for each set:



10) The sum of the measures of the interior angles of a polygon is five times the sum of the measures of its exterior angles, one angle at each vertex. How many sides does the polygon have?

11) In quadrilateral  $ABCD$ ,  $m\angle A = x$ ,  $m\angle B = 2x$ ,  $m\angle C = 3x$ , and  $m\angle D = 4x$ . Find the value of  $x$  and then state which pair of sides of  $ABCD$  must be parallel.