## Name:

$\qquad$

## Polygons

Exercise 1: Find the value of $x$ from the information provided in the diagram below:


Exercise 2: Each side of a regular dodecagon measures 7 in. Find the perimeter.

Exercise 3: The perimeter of an equilateral octagon is 42 cm . Find the length of each side.

Exercise 4: The perimeter of the regular polygon $A B C D E$ is 94 m . find the lengths of segments $A B$ and CD.

Exercise 5: One exterior angle of a regular polygon measures $10^{\circ}$. What is the measure of each interior angle? How many sides does the polygon have?

Exercise 6: The sum of the measures of the interior angles of a regular polygon is $2340^{\circ}$. How many sides does the polygon have?

Exercise 17: Find each lettered angle measure.


