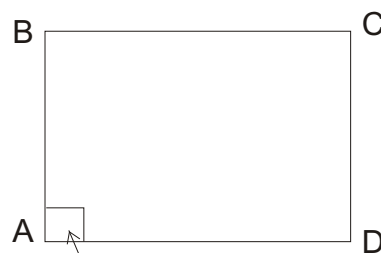


Angles

Naming and Measuring

\angle = the symbol for angle

$\overline{\quad}$ = the symbol for side that you place over two letters. For example, you can say that $\overline{BA} = \overline{CD}$. This is just a shorter way of saying side BA is equal to side CD.



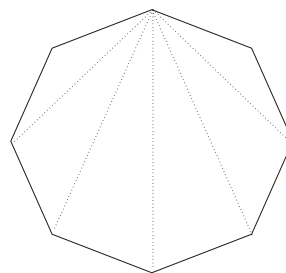
This angle should be labeled \angle BAD.

Notice that the letter A is the middle letter. The letter right next to the angle you are talking about will always be in the middle.

$(\# \text{ of sides } - 2) \times (180) = \text{total number of degrees of a polygon}$

Example: How many degrees are there when you add the angles inside the Octagon?

When you get a question like this one, use the formula that is given.

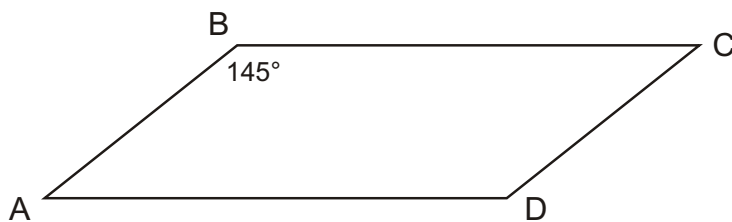
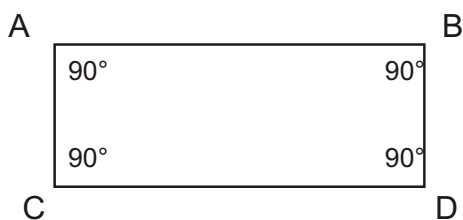
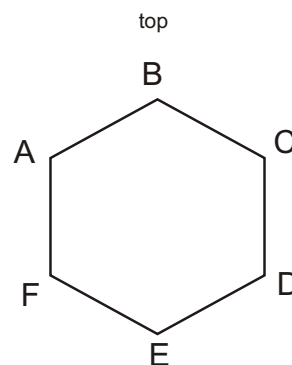
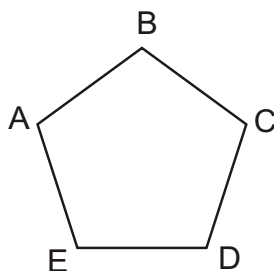
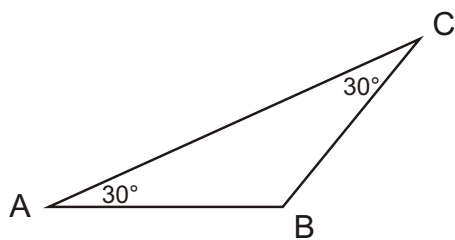


$(\# \text{ of sides } - 2) \times (180) = \text{total number of degrees of a polygon}$

$(8-2) \times (180)$

$6 \times 180 = 1,080^\circ$

Use the following polygons to answer questions 1 through 20.



Triangle

- 3 1) Make a list of all three sides of the triangle.
- 3 2) Make a list of all three angles of the triangle.
- 1 3) Which one of the three angles is obtuse?
- 2 4) Which two angles of the triangle are acute?
- 1 5) If $\angle BAC$ is 30° and $\angle ACB$ is 30° , how many degrees is $\angle ABC$?
(Hint, all three angles must add up to 180° .)

Pentagon

- 3 6) Correctly label three angles of the pentagon.
- 5 7) List all five sides of the pentagon.
- 1 8) What angle is at the top of the pentagon?
- 1 9) How many degrees are there when you add the angles inside the pentagon?
(Remember to use the formula!)

Hexagon

- 1 10) What angle is at the top of the hexagon?
- 4 11) List four sides of the hexagon.
- 1 12) How many degrees are there when you add the angles inside the hexagon?

Rectangle

- 2 13) List two sides that are equal.(look at the example on page 1.)
- 2 14) List two angles that have right angles.
- 1 15) What is the sum(add) of $\angle CAB$ and $\angle ABD$?
- 1 16) How many degrees are there when you add up the angles inside the rectangle?

Parallelogram

- 1 17) How many degrees is $\angle ADC$?
- 2 18) List the two angles that are 145° .
- 4 19) What sides are equal in the parallelogram? _____ = _____ and _____ = _____
- 1 20) How many degrees are there when you add up all of the angles inside the parallelogram?

40 points
possible.