Perimeter

Perimeter is the distance around an area. To calculate the perimeter of an area you **add** all the **sides** together. Let's say you are building a fence in a customer's backyard. You would have to calculate the perimeter of the property to know how much fencing material you would need.

Areas can be different shapes: squares, rectangles, triangles, octagons, etc. If their sides are straight lines, they are called **regular polygons**. To calculate perimeter for regular polygons, use the formula:

$$P = A+B+C+D...$$

The formula tells you to add the lengths of all the sides. The calculation used to determine perimeter for irregular shapes and circles is different. If you want to learn how to calculate perimeter for these shapes, ask your instructor. For the purposes of this course, a general understanding of basic perimeter calculations is sufficient.

On the next page you will find a learning activity to help you practice the information you just learned.

Learning Activity – Perimeter

1. Calculate the perimeters of the following shapes.

   A   B   C
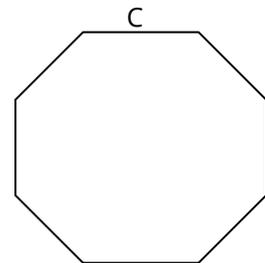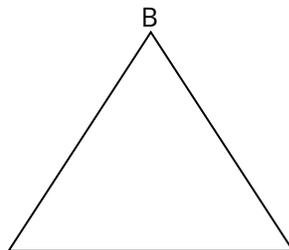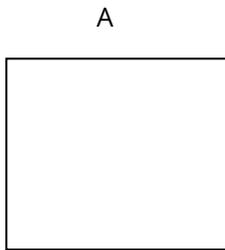
A = one side is 4 inches   The perimeter of A = _____

B = one side is 5 feet   The perimeter of B = _____

C = one side is 3 cm   The perimeter of C = _____

2. Four Greens Landscaping is building a fence in a customer's backyard.
   a) The distance to be fenced in is called the **run**. Most types of fencing are sold in **8 foot sections**. The property to be fenced in is a **rectangular** shape. The length is 128 feet long and the width is 64 feet. What is the perimeter of the run?

   _____

b) Calculate the cost of the fence for each of the following fencing options. (Remember always round up. It is better to have some extra than to not have enough.)

Type of Fence	Cost per Section	Section Length	Cost
Basket Weave	$ 8.75	6 ft. by 8 ft.	$_____
PVC	$16.51	6 ft. by 8 ft.	$_____
Iron	$17.41	6 ft. by 8 ft.	$_____
Privacy Wood	$ 7.99	6 ft. by 8 ft.	$_____
Chain Link	$ 4.90	6 ft. by 8 ft.	$_____
Basket Red Cedar	$ 9.30	6 ft. by 5 ft.	$_____

c) What is the cheapest option for completing the fence?
_____

d) What is the most expensive option for completing the fence?

_____

e) The customer has looked at the pricing chart above and has expressed an interest in the Basket Red Cedar fence. You know the customer has a budget of $500 for the fence. Is the Basket Red Cedar fence a good option? If not, explain your answer as you would do with a real-life customer.

_____

_____

_____

_____

3. Four Greens Landscaping has been hired to edge the perimeter of an octagonal shaped flower bed in an amusement park. One side measures 40 ft. Calculate the perimeter of the bed.

    _____

4. a) How much would the materials cost to install a PVC fence around an irregular shaped pool deck? Use the fencing chart in question 2b. The deck has four irregular sized sides. The measurements are as follows:

    Side 1 = 9 ft.

    Side 2 = 12 ft.

    Side 3 = 13 ft.

    Side 4 = 20 ft.

Answer: _____

b) How many sections of fence would you need to order to enclose the pool deck?

    _____