

## Perimeters of Polygons

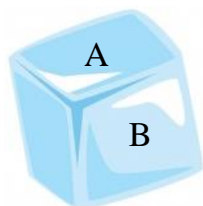
1. Calculate the perimeter of each of the following.

- Square with side length 5 cm. \_\_\_\_\_
- Equilateral triangle with side length 3 cm. \_\_\_\_\_
- Regular octagon with side length 2 cm. \_\_\_\_\_
- Regular pentagon with side 5 cm. \_\_\_\_\_
- Rectangle with dimension 3 cm by 4 cm. \_\_\_\_\_
- Regular hexagon with side length 4 cm. \_\_\_\_\_

2. The perimeter of the chalkboard is 32 feet. It is 4 feet wide. How long is it?

Solution:

3. If each side of the ice cube below is 1 inch long, find the difference between the perimeters of the face labeled A and the face labeled B.

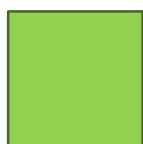


Solution:

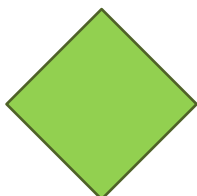
4. True or False

- The perimeter of a square is independent of its side length. \_\_\_\_\_
- The perimeter of any plane figure has the same unit of measurement as its length. \_\_\_\_\_
- The perimeter of any plane figure can be equal to one of its side length. \_\_\_\_\_
- The perimeter of a square with a side length of 4 cm is equal to the perimeter of a rectangle with dimension 8 cm by 2 cm (ignoring the unit). \_\_\_\_\_

5. If each of the following polygons is regular and each side length is 4 cm each, find the perimeter.



Solution:



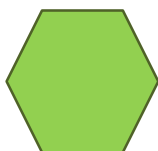
Solution:



Solution:



Solution:



Solution:



Solution:

# Perimeters of Polygons

## Answer Key

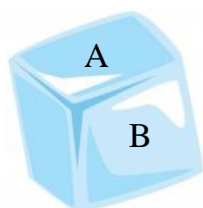
1. Calculate the perimeter of each of the following.

- a. Square with side length 5 cm. 20 cm
- b. Equilateral triangle with side length 3 cm. 9 cm
- c. Regular octagon with side length 2 cm. 16 cm
- d. Regular pentagon with side 5 cm. 25 cm
- e. Rectangle with dimension 3 cm by 4 cm. 14 cm
- f. Regular hexagon with side length 4 cm. 24 cm

2. The perimeter of the chalkboard is 32 feet. It is 4 feet wide. How long is it?

12 feet

3. If each side of the ice cube below is 1 inch long, find the difference between the perimeters of the face labeled A and the face labeled B.



0 in. Both are the same

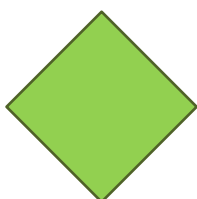
4. True or False

- a. The perimeter of a square is independent of its side length. False
- b. The perimeter of any plane figure has the same unit of measurement as its length. True
- c. The perimeter of any plane figure can be equal to one of its side lengths. False
- d. The perimeter of a square with a side length of 4 cm is equal to the perimeter of a rectangle with dimension 8 cm by 2 cm (ignoring the unit). True

5. If each of the following polygons is regular and each side length is 4 cm each, find the perimeter.



16 cm



16 cm



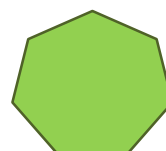
12 cm



20 cm



24 cm



28 cm