Perime	ter of a Regular Polygon
A. Choose the Correct Answ	ver:
1. A regular polygon has al	l sides:
a) Different lengths	b) Curved
c) Equal in length	d) Triangular
2. What is the perimeter of	f a regular hexagon with each side measuring 6 cm?
a) 36 cm	b) 30 cm
c) 18 cm	d) 12 cm
3. A regular pentagon has a	a side of 5 cm. Its perimeter is:
a) 10 cm	b) 20 cm
c) 25 cm	d) 15 cm
4. Which of the following	is the correct formula for the perimeter of a regular
polygon?	
a) Number of sides + len	gth of one side
b) Number of sides × len	gth of one side
c) Side × Side	
d) Side + Side	
5. A regular polygon has 8	sides, each of length 4 cm. Its perimeter is:
a) 16 cm	b) 32 cm
c) 40 cm	d) 24 cm

B. Write the Missing Terms to Complete the Sentences:

- 1. A polygon with all sides equal and all angles equal is called a _____ polygon.
- 2. The perimeter of a regular polygon is equal to the number of sides multiplied by the _____ of one side.
- 3. A regular triangle is also called an _____ triangle.
- 4. A regular polygon with 4 equal sides is called a _____.
- 5. The perimeter of a regular octagon with side length 9 cm is _____ cm.

C. Figure out the answers to these questions:

- 1. Draw a regular pentagon with side 5 cm. Write the formula used to calculate its perimeter.
- 2. A regular polygon has 10 sides and each side is 4.5 cm. Calculate the total perimeter.

- 3. The perimeter of a regular polygon is 72 cm. If it has 6 sides, what is the length of each side?
- 4. Compare the perimeters of two regular polygons one with 5 sides of 6 cm each and another with 6 sides of 5 cm each.
- 5. A fence is to be built around a regular polygon-shaped park with 8 sides, each of 12 m. How much fencing wire is needed?

D. Mark each sentence with a True (\checkmark) or False (X):

- 1. A regular polygon always has equal sides.
- 2. The formula for perimeter of a regular polygon is: perimeter = number of sides × length of one side.
- 3. A triangle can never be a regular polygon.
- 4. A square is a regular polygon.
- 5. All regular polygons have curved sides.

E. Challenge yourself with these questions:

- 1. A flowerbed is shaped like a regular hexagon with each side 2.5 m long. How much fencing is required to surround it?
- 2. Create your own regular polygon and calculate its perimeter.
- 3. A regular polygon has 12 sides and each side is 7 cm long. What is its total boundary length?
- 4. Make a real-life list of objects that resemble regular polygons. Write down their estimated perimeters.
- 5. Use toothpicks to form a regular pentagon. Measure and calculate its perimeter.

F. Find the perimeter of each of the following figures.

