Grade 5 Answers

Find and Estimate Perimeters

Explore and Grow
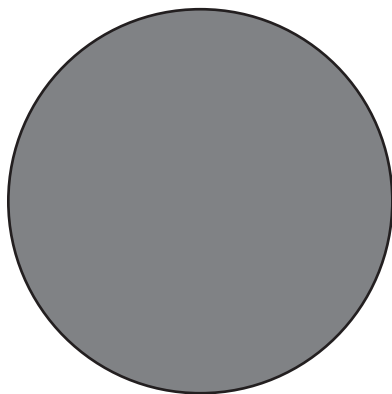
Sample answers are given:

Triangle: about 12 centimeters; I used a ruler to measure the side lengths and then added them.

Hexagon: about 6 inches; I used a ruler to measure the side lengths and then added them.

Semi-circle: about 16 centimeters; I used a ruler to measure the straight side, then string and a ruler to measure the curved side, and then added the values.

Crescent: about 21 centimeters; I used string and a ruler to measure each curved side and then added the values.

If you cut the circle in half, the straight length is 2 inches. The length of the curved portion of each half of the circle is more than 2 inches, but less than 4 inches, so about 3 inches. When you put the two halves of the circle back together, you get 3 inches + 3 inches = about 6 inches.

Think and Grow

Example 6, 6, 6; 18; 18 inches

Example *Sample answer:* 9; 2, 6, 2; 9, 2, 6, 2, 19

Show and Grow

1. 15 cm

2. *Sample answer:* about 20 units

Apply and Grow: Practice

3. 30 m   4. 42 ft   5. 22 in.

6. *Sample answer:* about 26 units

7. *Sample answer:* about 21 units

8. *Sample answer:* about 14 centimeters

9. *Sample answer:* about 12.5 centimeters

10. quadrilateral, parallelogram; 38 yd

11. *Sample answer:* Use a ruler to measure the lengths

of the two straight sides, then use a string and a ruler to measure the lengths of the two curved sides. Then add all four side lengths together.

Think and Grow: Modeling Real Life

Example *Sample answer:* 1.5, 1.3, 3.8, 1.5, 1.3, 1.3, 2, 2.3, 15; 15; 1,500

Show and Grow

12. *Sample answer:* about 164 kilometers

13. *Sample answer:* Draw more line segments.

Homework & Practice

1. 29 in.   2. 16 m   3. 18 cm

4. *Sample answer:* about 30 units

5. *Sample answer:* about 18 units

6. *Sample answer:* about 14 centimeters; I used a ruler to measure the lengths of the straight sides and string and a ruler to measure the length of the curved side. Then I added all four side lengths together.

7. *Sample answer:* about 11 centimeters; I used string and a ruler to measure the perimeter of the oval.

8. quadrilateral, parallelogram, rhombus; 140 mm

9. *Sample answer:* about 870 kilometers

10. Descartes's fort; *Sample answer:* about 15 meters greater; The perimeter of Descartes's fort is about 222 meters and the perimeter of Newton's fort is about 205 meters. 222 is about 220, and 220 − 205 = 15.

Review & Refresh

11. *Sample answer:* 4   12. *Sample answer:* 12