# **Chapter 8 BLM Answers**

## **BLM 8-3 Perimeter and Area**

- **1. a)** 24 cm **b)** 22 cm
- **2. a)** P = 2 cm; Q = 3 cm
  - **b)** P = 2 cm; Q = 5 cm
- **3. a)** 6 squares
  - **b)** 7 squares
  - c) 5 squares
- **4. a)** 7 squares
  - **b)** 9.5 squares
  - c) 6.5 squares
- **5. a)** 14 cm **b)** 16 cm
- **6. a)** 9 cm<sup>2</sup> **b)** 12 cm<sup>2</sup>
- **7.** 44 cm
- **8.** Answers will vary. For example: Count 4 squares in top row and add 1 square in bottom row. Divide into 2 rectangles and count 3 in horizontal rectangle and 2 in vertical rectangle. Make one large rectangle of 8 squares and subtract 3 squares.
- **9. a)** C. Answers will vary. For example: C has the most fingers.
  - **b)** Answers will vary. For example: Measure the length of one finger and multiply by 8.
  - c) B. Answers will vary. For example: B is a full circle. A and C may have the same diameter but have missing pieces.

#### **BLM 8-6 Section 8.1 Extra Practice**

- **1. a)** centre, radius, r
  - **b)** diameter, d
  - c) diameter, radius
- **2.** Look for three concentric circles with different diameters: 4, 5, and 3 cm.

#### **BLM 8-8 Section 8.2 Extra Practice**

- **1. a)** circumference, *C* **b)** diameter, radius
  - c) multiplying d) dividing
- **2. a)** 10.4 **b)** 6.2
  - **c)** 137.5 **d)** 3045.1
- 3. Answers are in italics.
  - **a)** 22.2, 44.4, 139.4
  - **b)** 38.5, 77, 241.8
  - c) 17.9, 35.7, 112
  - **d)** 237, 474, 1488.4

#### BLM 8-10 Section 8.3 Extra Practice

- **1. a)** base, height **b)**  $\pi \times r$  **c)** base
  - **d)** radius **e)** base, height,  $\pi \times r \times r = \pi \times r^2$
- 2. Answers are in italics.
  - **a)** 5, 25, 10, 75 **b)** 8, 64, 16, 192
- 3. Answers are in italics.
  - **a)** 11, 22, 379.9 **b)** 6, 12, 113.0

## **BLM 8-12 Section 8.4 Extra Practice**

- a) Hockey, soccer, basketball, baseball, volleyball. (Baseball and volleyball tied.)
  - **b)**  $25\% = \frac{25}{100} = \frac{1}{4}$
  - **c)** 5%
  - d) Look for any two sports not surveyed.
- **2. a)** Hockey,  $35\% = 0.35 \times 120 = 42$ 
  - **b)** Soccer,  $25\% = 0.25 \times 120 = 30$
  - **c)** Basketball,  $15\% = 0.15 \times 120 = 18$
  - **d)** Baseball,  $10\% = 0.10 \times 120 = 12$
  - **e)** Volleyball,  $10\% = 0.10 \times 120 = 12$
  - **f)** Other,  $5\% = 0.05 \times 120 = 6$
- **3. a)** 120. The numbers in a circle graph need to add up to 100% of the total.
  - **b)** The final column should add up to 120.

# BLM 8-17 Section 8.5 Extra Practice

1. a) Answers are in italics.

$$6 + 11 + 5 + 2 + 1 = 25, 25$$

**b)** 2, 11,  $\frac{11}{25}$ , 44%, 0.44, 0.44 × 360° = 158°

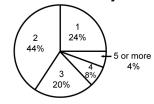
3, 5, 
$$\frac{5}{25}$$
, 20%, 0.2, 0.2 × 360° = 72°

4, 2, 
$$\frac{2}{25}$$
, 8%, 0.08, 0.08 × 360° = 29°

5 or more, 1,  $\frac{1}{25}$ , 4%, 0.04, 0.04 ×

Totals: 25, 100%, 1.00, 359°

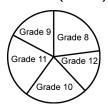
c) Children Per Family



(continued)

# BLM 8-18 Chapter 8 Test

- 1. C 2. D 3. F 4. B 5. G 6. A 7. B
- **8.** D **9.** B **10.** A **11.** 9.4 cm
- **12.**  $A = \pi \times r^2$   $A = \pi \times 7.5^2$ 
  - $A \approx 176.6 \text{ m}^2$
- **13. a)** Answers are in italics. 10, 280, 77.5° 12, 200, 55.4°
  - **b)** Students should use a protractor to make sectors for Grades 10 (77.5°) and 12 (55.4°).



- **14. a)**  $C = \pi \times d$   $3.14 \times 20 \text{ m} = 62.8 \text{ m}$   $62.8 \text{ m} \times \$75 = \$4710$ 
  - **b)** 62.8 m × \$84= \$5275.20
  - **c)** \$565.20
  - **d)**  $A = \pi \times r^2$ 3.14 × 100 = 314 m<sup>2</sup> 314 m<sup>2</sup> × \$80 = \$25 120