Practice 11-1

Unit Rates

- **1.** A box of dried fruit has 36 calories in 3 servings. How many calories are there per serving?
- 2. In a week, 20 hens laid 80 eggs. What is the unit rate for eggs per hen?
- **3.** A 15-pound bag of wildflower seed covers 40 square feet. How many pounds of seed does it take to cover 1 square foot?
- **4.** An animal gained 6 pounds steadily over 12 years. What is the unit rate of pounds per year?
- **5.** A plant grew 19 inches over 5 months. The plant grows the same amount each month. Use this rate to complete the table.

Month	Growth (inches)
1	
2	
3	
4	
5	19
6	

- **6.** A migrating bird flies 420 miles in 14 hours. How many miles does it fly in 5 hours?
- **7. a) Writing** Exactly 240 years ago, students planted a tree in front of their school. Since then, the tree has grown 30 meters taller, and the distance around the trunk has increased by 3 meters. Describe how you can use this information to find at least two different unit rates.
 - b) Find the unit rate for the increase in the tree's trunk.

ANSWER KEY

Practice 11-1: Unit Rates

- **1.** 12
- 2. 4
- **3.** 0.375
- **4.** 0.5
- **5.** 3.8
 - 7.6
 - 11.4
 - 15.2
 - 22.8
- **6.** 150
- 7. a) Answers will vary
 - **b)** 0.0125 m/yr
- 8. a) Answers will vary
 - **b)** 36
 - 72
 - 108
 - 504
 - 756
 - c) 3 gallons
- 9. 1 minute

The order of the terms are reversed compared to the given rate.

- **10**. 693
- **11.** 0.2 mm per year
- 12. a) Answers will vary
 - **b)** 16
- $13. \ \ \frac{369 \text{ flaws}}{9 \text{ square meters}}$
- **14.** a) D
 - **b)** 5.5
 - 38.5
 - 77
 - 165
- **15. a)** Answers will vary
 - b) 3 parking spaces 8 customers