Name _____ Class _____ Date _____

1. In a bouquet of flowers, there are 7 daisies and 17 roses. Write the ratio of daisies to roses in three different ways.

2. A jug of juice has 6 cups of pineapple juice and 5 cups of orange juice. Write the ratio of number of cups of pineapple juice to total number of cups of juice in three different ways.

3. Which ratio is equivalent to $\frac{4}{7}$ with greater terms?

   ○ A. $\frac{7}{10}$ ○ C. $\frac{12}{21}$

   ○ B. $\frac{21}{12}$ ○ D. $\frac{7}{4}$

4. The attendant at a parking lot compared the number of hybrid vehicles to the total number of vehicles in the lot over a weekend. The ratios for the three days were equivalent. Complete the table.

Day	Hybrids	Total
Fri.	5	8
Sat.	____	56
Sun.	45	____

5. Write the ratio 6 ft to 4 yd as a fraction in simplest form.

6. You spend 15 minutes watching television. You then spend 1 hour reading e-mail. Write the ratio of the amount of time spent watching television to the amount of time spent reading email as a fraction in simplest form.

7. **Multiple Representations** One day, the local hardware store sold 22 buckets of basic house paint and 12 buckets of ultimate house paint. A bucket of basic house paint uses 3 cans of white paint and 7 cans of color paint.

   a) For a bucket of basic house paint, write the ratio of cans of color paint to cans of white paint in three different ways.

   b) Draw a picture to represent the correct ratio in a fourth way.

8. **Personal Communication Fees** An Internet, telephone, and cable TV package plan costs $80 each month. The Internet part of the bill is $23. The telephone part of the bill is $16. Write the ratio of the Internet bill to the cable TV bill in three different ways.

9. **Error Analysis** A survey of 25 people found that 10 had the same Internet service provider. The survey reported this information as the ratio 10 : 25. Reports about the survey used the ratios 12 : 29, 12 : 30, 2 : 5, and 4 : 10 to describe the results.

a) Which of the ratios is not equivalent to the ratio 10 : 25?

   ○ A. 4 : 10   ○ C. 2 : 5

   ○ B. 12 : 30   ○ D. 14 : 29

b) What was the error?

   ○ A. The terms have a common factor greater than 1.

   ○ B. The terms of the ratio are reversed.

   ○ C. The same number was not added to or subtracted from the terms of the original ratio.

   ○ D. The terms of the original ratio were not multiplied or divided by the same number.

10. a) **Writing** Find a ratio equivalent to $\frac{12}{21}$ with lower terms.

b) Compare finding a ratio equivalent to $\frac{12}{21}$ with lower terms and finding a ratio equivalent to $\frac{12}{21}$ with greater terms.

11. a) **Reasoning** Write the ratio 42 inches to 9 feet as a fraction in simplest form.

b) Explain why you get the same result whether you convert feet to inches or convert inches to feet.

c) Why might you prefer one way over the other?

12. Mark, a professional basketball player, scored 6 points in the first quarter of a game. The two teams scored a total of 41 points in the first quarter. At the end of two quarters, Mark had scored 11 points. However, his team was trailing by a score of 45 to 36.

a) What are three correct ways to write the ratio of Mark's first quarter points to the total points scored in the first quarter?

   ○ A. 6 to 41, 6 : 41, or $\frac{41}{6}$ ○ D. 41 to 6, 41 : 6, or $\frac{41}{6}$

   ○ B. 41 to 6, 41 : 6, or $\frac{6}{41}$ ○ E. 6 to 41, 6 : 41, or $\frac{6}{41}$

   ○ C. 6 to 41, 41 : 6, or $\frac{41}{6}$ ○ F. 41 to 6, 6 : 41, or $\frac{6}{41}$

b) What are three correct ways to write the ratio of Mark's points for the two quarters to his team's total points for the two quarters?

   ○ A. 11 to 36, 11 : 36, or $\frac{11}{36}$ ○ D. 36 to 11, 36 : 11, or $\frac{36}{11}$

   ○ B. 11 to 45, 11 : 45, or $\frac{11}{45}$ ○ E. 11 to 25, 25 : 11, or $\frac{25}{11}$

   ○ C. 45 to 11, 45 : 11, or $\frac{11}{45}$ ○ F. 25 to 11, 11 : 25, or $\frac{11}{25}$