

Practice 1-1

Equivalent Ratios

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.

- 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 $\frac{41}{6}$
- B. 41 to 6, 41 : 6, or $\frac{6}{41}$
- C. 6 to 41, 41 : 6, or $\frac{41}{6}$
- D. 41 to 6, 41 : 6, or $\frac{41}{6}$
- E. 6 to 41, 6 : 41, or $\frac{6}{41}$
- 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 $\frac{11}{36}$
- B. 11 to 45, 11 : 45, or $\frac{11}{45}$
- C. 45 to 11, 45 : 11, or $\frac{11}{45}$
- D. 36 to 11, 36 : 11, or $\frac{36}{11}$
- E. 11 to 25, 25 : 11, or $\frac{25}{11}$
- F. 25 to 11, 11 : 25, or $\frac{11}{25}$

13. Mental Math In a toy store, the ratio of the number of dolls to the number of teddy bears is 6 : 5.

a) If the store has 240 dolls, how many teddy bears are in the store?

b) Describe the mental math steps you use to solve this problem.

14. Challenge In basketball, some baskets are worth two points. Others are worth three points. In one game, the ratio of three-point baskets to three-point tries for one team was 3 : 4. If the team scored 27 points from three-point baskets, how many three-point tries did the team have?

15. Challenge A garden is 3 yards 12 inches wide and 8 yards long. Write the ratio of the width to the length as a fraction in simplest form.