Unit 2 Assessment ~ Ratios and Rates
EdGems Math – Course 1

Name_____ Period_____ Date_____

Write each ratio as a fraction in simplest form.

1. 8 : 24

2. 14 to 35

3. Ten puppies and 12 kittens are being given away.

a. Write the ratio of puppies to kittens that are being given away.

b. Write the ratio of kittens to total animals being given away.

4. Complete the ratio table.

Mice	4		16	20	
Rats	3	9			30

5. The ratio of men to women at a basketball game was 3 : 2.

a. What does this ratio mean?

b. Suppose there were 90 men at the basketball game. How many women were at the game?

6. The ratio of the width to length of a rectangular patio is 2 : 3. If the length of the patio is 6 yards, find the area of the patio in square yards.

Find each unit rate.

7. $\frac{\$4.40}{4 \text{ pencils}}$

8. $\frac{80 \text{ miles}}{2 \text{ hours}}$

9. Amber walked 12 miles in 3 hours. At this rate, how far will she walk in 5 hours?

10. Which of the two rates is larger? $\frac{40 \text{ kilometers}}{2 \text{ hours}}$ or $\frac{63 \text{ kilometers}}{3 \text{ hours}}$

11. A 30-ounce jar of peanut butter costs $6.00. A 40-ounce jar costs $7.20. Which jar of peanut butter is cheaper per ounce?

Complete each conversion.

12. 4 hours = _____ minutes

13. 36 inches = _____ feet

14. 2 kilograms = _____ grams

15. Tim's work converting 30 centimeters to meters is shown below. Explain whether or not his work is correct. If it is incorrect, show Tim how to find the correct conversion.

Problem: 30 centimeters = _____ meters

I know: 1 meter = 100 centimeters

My work: 30 centimeters × 100 = 3,000 meters

Answer: 30 centimeters = 3,000 meters

16. Sammy walks home from school every day at a rate of 4 miles per hour. It takes him 30 minutes to reach home. His sister, Candy, runs home from the same school every day at a rate of 6 miles per hour. How many fewer minutes does it take Candy to reach home from school each day compared to Sammy?

Unit 2 Assessment ~ Ratios and Rates
EdGems Math – Course 1

Name_____ Period_____ Date_____

Write each ratio as a fraction in simplest form.

1. 22 : 33

2. 6 to 24

3. Ten puppies and 8 kittens are being given away.

a. Write the ratio of puppies to kittens that are being given away.

b. Write the ratio of kittens to total animals being given away.

4. Complete the ratio table.

Ants	2		10	12	
Spiders	5	15			50

5. The ratio of men to women at a basketball game was 4 : 3.

a. What does this ratio mean?

b. Suppose there were 80 men at the basketball game. How many women were at the game?

6. The ratio of the width to length of a rectangular patio is 2 : 3. If the width of the patio is 6 yards, find the area of the patio in square yards.

Find each unit rate.

7. $\frac{\$4.80}{4 \text{ pencils}}$

8. $\frac{60 \text{ miles}}{2 \text{ hours}}$

9. Amber walked 9 miles in 3 hours. At this rate, how far will she walk in 5 hours?

10. Which of the two rates is larger? $\frac{57 \text{ kilometers}}{3 \text{ hours}}$ or $\frac{80 \text{ kilometers}}{4 \text{ hours}}$

11. A 20-ounce jar of peanut butter costs $8.00. A 30-ounce jar costs $10.50. Which jar of peanut butter is cheaper per ounce?

Complete each conversion.

12. 5 hours = _____ minutes

13. 48 inches = _____ feet

14. 3 kilograms = _____ grams

15. Nik's work converting 40 centimeters to meters is shown below. Explain whether or not his work is correct. If it is incorrect, show Nik how to find the correct conversion.

Problem: 40 centimeters = _____ meters

I know: 1 meter = 100 centimeters

My work: 40 centimeters × 100 = 4,000 meters

Answer: 40 centimeters = (4,000) meters

16. Carl walks home from school every day at a rate of 6 miles per hour. It takes him 30 minutes to reach home. His sister, Leslie, runs home from the same school every day at a rate of 8 miles per hour. How many fewer minutes does it take Leslie to reach home from school each day compared to Carl?

Answer Key – Unit Assessment
Unit 2: *Ratios and Rates*

Form A

1. $\frac{1}{3}$
2. $\frac{2}{5}$
3. **a.** 5 : 6
   b. 6 : 11
4.

Mice	4	**12**	16	20	**40**
Rats	3	9	**12**	**15**	30

5. **a.** For every 3 men, there were 2 women at the game.
   b. 60 women
6. 24 square yards
7. $\frac{\$1.10}{1 \text{ pencil}}$ ($1.10 per pencil)
8. $\frac{40 \text{ miles}}{1 \text{ hour}}$ (40 miles per hour)
9. 20 miles
10. $\frac{63 \text{ kilometers}}{3 \text{ hours}}$ (20 *km*/hour < 21 *km*/hour)
11. The 40-ounce jar is cheaper per ounce because the 30-ounce jar costs $0.20 per ounce and the 40-ounce jar costs $0.18 per ounce.
12. 240
13. 3
14. 2,000
15. Incorrect; Tim should have divided by 100 in his work. 30 *cm* = 0.3 *m*
16. It takes Candy 10 fewer minutes to get home than Sammy.

Form B

1. $\frac{2}{3}$
2. $\frac{1}{4}$
3. **a.** 5 : 4
   b. 4 : 9
4.

Ants	2	**6**	10	12	**20**
Spiders	5	15	**25**	**30**	50

5. **a.** For every 4 men, there were 3 women at the game.
   b. 60 women
6. 54 square yards
7. $\frac{\$1.20}{1 \text{ pencil}}$ ($1.20 per pencil)
8. $\frac{30 \text{ miles}}{1 \text{ hour}}$ (30 miles per hour)
9. 15 miles
10. $\frac{80 \text{ kilometers}}{4 \text{ hours}}$ (19 *km*/hour < 20 *km*/hour)
11. The 30-ounce jar is cheaper per ounce because the 20-ounce jar costs $0.40 per ounce and the 30-ounce jar costs $0.35 per ounce.
12. 300
13. 4
14. 3,000
15. Incorrect; Nik should have divided by 100 in his work. 40 *cm* = 0.4 *m*
16. It takes Leslie 7.5 fewer minutes to get home than Carl.