

Grade 7 Complex Fractions and Unit Rates

Fractions • Grade 7 • CCSS 7.RP.1

Name: _____

Date: _____

Simplify each complex fraction. For the word problems, divide to find the unit rate.

1. $(1/2) \div (1/4) =$

2. $(3/4) \div (1/8) =$

3. $(2/3) \div (1/6) =$

4. $(1/2) \div (3/4) =$

5. $(5/6) \div (2/3) =$

6. $(3/8) \div (1/2) =$

7. $(7/10) \div (1/5) =$

8. $(2/5) \div (4/15) =$

9. A runner covers $1/2$ mile in $1/4$ hour. What is the unit rate in miles per hour?

10. A snail travels $\frac{1}{8}$ foot in $\frac{1}{2}$ minute. What is the unit rate in feet per minute?

11. A recipe uses $\frac{3}{4}$ cup of flour for $\frac{1}{2}$ of a batch. What is the unit rate in cups per batch?

12. A hose delivers $\frac{2}{3}$ gallon in $\frac{1}{6}$ minute. What is the unit rate in gallons per minute?

13. $\frac{2}{3}$ of a can of paint covers $\frac{1}{2}$ of a wall. What is the unit rate in walls per can?

14. A cyclist rides $3\frac{1}{2}$ miles in $\frac{1}{4}$ hour. What is the unit rate in miles per hour?

15. A machine finishes $\frac{5}{8}$ of a part in $\frac{1}{4}$ hour. What is the unit rate in parts per hour?

16. A pipe leaks $\frac{3}{10}$ liter in $\frac{3}{4}$ hour. What is the unit rate in liters per hour?

Answer Key

Grade 7 Complex Fractions and Unit Rates — Grade 7

- | | | |
|-------------------|-----------------------------------|-----------------------------------|
| 1. 2 | 7. $3\frac{1}{2}$ | 13. $\frac{3}{4}$ wall per can |
| 2. 6 | 8. $1\frac{1}{2}$ | 14. 14 miles per hour |
| 3. 4 | 9. 2 miles per hour | 15. $2\frac{1}{2}$ parts per hour |
| 4. $\frac{2}{3}$ | 10. $\frac{1}{4}$ foot per minute | 16. $\frac{2}{5}$ liter per hour |
| 5. $1\frac{1}{4}$ | 11. $1\frac{1}{2}$ cups per batch | |
| 6. $\frac{3}{4}$ | 12. 4 gallons per minute | |