

Algebra I

4.4 Warm-Up #1

Reciprocals

NAME: _____

DATE: _____ HOUR: _____

- Two numbers are _____ if their sum is zero.
- The number _____ is its own opposite.
- Two numbers are _____ if their product is one.
- The number _____ is its own reciprocal.
- Any number that can be written as a fraction is called a _____ number.
- All rational numbers except _____ have a reciprocal.
- To find the reciprocal of a simple fraction, _____ the numerator and the denominator.
- The product of two reciprocals is _____.
- Convert these mixed fractions to improper fractions then write their reciprocals:

$$1\frac{2}{3} = \frac{\quad}{\quad}$$

reciprocal _____

$$2\frac{3}{5} = \frac{\quad}{\quad}$$

reciprocal _____

$$-3\frac{1}{4} = \frac{\quad}{\quad}$$

reciprocal _____

$$-2\frac{1}{8} = \frac{\quad}{\quad}$$

reciprocal _____

$$4\frac{4}{9} = \frac{\quad}{\quad}$$

reciprocal _____

Identify the **coefficient** of each variable then identify the **reciprocal of the coefficient**.

1. $\frac{2}{3}a$ coefficient: _____

reciprocal of coefficient: _____

2. $-\frac{1}{6}b$ coefficient: _____

reciprocal of coefficient: _____

3. $-\frac{1}{8}c$ coefficient: _____

reciprocal of coefficient: _____

4. $-9a$ coefficient: _____

reciprocal of coefficient: _____

5. $5b$ coefficient: _____

reciprocal of coefficient: _____

6. $40c$ coefficient: _____

reciprocal of coefficient: _____

7. $\frac{2x}{5}$ coefficient: _____

reciprocal of coefficient: _____

8. $\frac{3y}{7}$ coefficient: _____

reciprocal of coefficient: _____

9. $-\frac{9z}{11}$ coefficient: _____

reciprocal of coefficient: _____

10. $-\frac{p}{8}$ coefficient: _____

reciprocal of coefficient: _____

11. $\frac{b}{3}$ coefficient: _____

reciprocal of coefficient: _____

12. $-\frac{a}{3}$ coefficient: _____

reciprocal of coefficient: _____