

Student: _____
Date: _____

Instructor: Deb Wertz
Course: MAP102 MASTER

Assignment: Homework #5

1. Select the answer that best completes the given statement.
-

$0 \cdot a = (1)$ _____

- (1) 0
 $\frac{1}{a}$
 1
 a
-

2. Select the answer that best completes the given statement.
-

The (1) _____ of the nonzero number b is $\frac{1}{b}$.

- (1) opposite square root
 reciprocal
 absolute value
 exponent
-

3. Select the correct choices that complete the sentence below.

$\frac{0}{4}$ is (1) _____ while $\frac{4}{0}$ is (2) _____

- (1) undefined (2) 4.
 0 0.
 undefined.
-

4. Select the correct choices that complete the sentence below.

The fraction $-\frac{a}{b} = (1)$ _____ = (2) _____

- (1) $\frac{a}{b}$ (2) $\frac{a}{-b}$
 $\frac{-a}{b}$ $\frac{a}{b}$
-

5. Select the answer that best completes the given statement.
-

The opposite of nonzero number a is (1) _____

- (1) $\frac{1}{a}$
 $-\frac{1}{a}$
 $-a$
 a
-

6. Select the correct choice that completes the sentence below.

The reciprocal of nonzero number a is (1) _____

- (1) $\frac{1}{a}$.
 $-a$.
-

7. Select the answer that best completes the given statement.

The (1) _____ property has to do with "order."

- (1) commutative
 distributive
 associative
-

8. Select the correct choice that completes the sentence below.

The (1) _____ property has to do with "grouping."

- (1) commutative
 associative
 distributive
-

9. Evaluate.

$$-3^2$$

$$-3^2 = \underline{\hspace{2cm}}$$

10. Find the value of the expression.

$$\left(-\frac{1}{10}\right)^3$$

$$\left(-\frac{1}{10}\right)^3 = \underline{\hspace{2cm}}$$

(Simplify your answer.)

11. Choose the fraction(s) equivalent to the given fraction.

$$-\frac{1}{5}$$

Select all that apply.

A. $\frac{1}{-5}$

B. $\frac{1}{5}$

C. $\frac{-1}{5}$

D. $\frac{-1}{-5}$

12. Choose the fraction(s) equivalent to the given fraction.

$$\frac{8}{-(p+r)}$$

Select all that apply.

A. $-\frac{8}{(p+r)}$

B. $\frac{8}{(p+r)}$

C. $\frac{-8}{(p+r)}$

D. $\frac{-8}{-(p+r)}$

13. Choose the fraction(s) equivalent to the given fraction.

$$\frac{-8r}{-9s}$$

Select all that apply.

A. $-\frac{8r}{9s}$

B. $\frac{-8r}{9s}$

C. $\frac{8r}{-9s}$

D. $\frac{8r}{9s}$

14. Evaluate $40 \div (8 \div 4)$ and $(40 \div 8) \div 4$. Use these two expressions and discuss whether division is associative.

$40 \div (8 \div 4) =$ _____ (Type an integer or a simplified fraction.)

$(40 \div 8) \div 4 =$ _____ (Type an integer or a simplified fraction.)

Therefore, division (1) _____ associative.

- (1) is
 is not

1. (1) 0

2. (1) reciprocal

3. (1) 0

(2) undefined.

4. (1) $\frac{-a}{b}$

(2) $\frac{a}{-b}$.

5. (1) $-a$.

6. (1) $\frac{1}{a}$.

7. (1) commutative

8. (1) associative

9. -9

10. $-\frac{1}{1000}$

11. A. $\frac{1}{-5}$, C. $\frac{-1}{5}$

12. A. $-\frac{8}{(p+r)}$, C. $\frac{-8}{(p+r)}$

13. D. $\frac{8r}{9s}$

14. 20

$\frac{5}{4}$

(1) is not
