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

\[0 \cdot a = (1) \, \underline{\text{__________}}\]

(1) \, 0
  \, \frac{1}{a}
  \, 1
  \, a

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

The (1) \, \underline{\text{__________}} \, \text{of the nonzero number } b \, \text{is} \, \frac{1}{b}.

(1) \, \text{opposite}
  \, \text{square root}
  \, \text{reciprocal}
  \, \text{absolute value}
  \, \text{exponent}

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

\[\frac{0}{4} \, \text{is (1) \, \underline{\text{__________}} \, \text{while} \, \frac{4}{0} \, \text{is (2) \, \underline{\text{__________}}}

(1) \, \text{undefined}
  \, 0
  \, 4.

(2) \, 0.
  \, 4.
  \, \text{undefined.}

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

The fraction \, \frac{a}{b} \, = (1) \, \underline{\text{__________}} \, = (2) \, \underline{\text{__________}}

(1) \, \frac{a}{b}
  \, -a
  \, \frac{-a}{b}

(2) \, \frac{a}{-b}
  \, \frac{a}{b}

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

The opposite of nonzero number \, a \, \text{is (1) \, \underline{\text{__________}}}

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

(2)  \(-a\).

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

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

(1)  commutative
(2)  distributive
(3)  associative

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

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

(1)  commutative
(2)  associative
(3)  distributive

9. Evaluate.

\[-3^2\]

\[-3^2 = \phantom{000}\]

10. Find the value of the expression.

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

\[\left( -\frac{1}{10} \right)^3 = \phantom{000}\]

(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.

\[
40 \div (8 \div 4) = \underline{\phantom{0}} \quad \text{(Type an integer or a simplified fraction.)}
\]

\[
(40 \div 8) \div 4 = \underline{\phantom{0}} \quad \text{(Type an integer or a simplified fraction.)}
\]

Therefore, division (1) \underline{\phantom{0}} associative.

(1) \quad \circ \; \text{is} \\
\quad \circ \; \text{is not}