IV.   Distance on a Number Line

1. Simplify the following.

- $|-4| =$

- $-|-3| =$

- $-2|3^2 - 10| =$

2. Find the distance between the two points -9 and -3 on a

    number line.

3. Write an expression for finding the distance between -11

    and -2 on a number line.

V.   Operations on Rational Numbers

1. Solve: $\frac{3(4-5^2)}{6} - 6 =$

2. Solve: $-2\left(2 - \frac{3}{4}\right) + 3^0 =$

3. Solve: $3\left(\frac{1}{2}\right) \div 3\frac{1}{2} =$

VI.   Squares and Square Roots of Positive Rational Numbers

1. Find $\sqrt{9}$.

2. Find $\sqrt{24}$.

3. Find -4^2.

4. Find $4^{\frac{3}{2}}$.

5. Find $\left(-\frac{3}{4}\right)^2$.

VII.   Cubes and Cube Roots of Rational Numbers

1. Find 6^3.

2. Find $(-4)^3$.

3. Find $\sqrt[3]{8}$.

4. Find $\sqrt[3]{16}$. Express your answer in simplest radical form.

5. Find $(-8)^{\frac{2}{3}}$.

VIII. Undefined Value Over the Set of Real Numbers

1. Solve $\frac{-3}{(8-2^3)}$ over the set of real numbers.

2. Solve $\sqrt{2^3 - 3^2}$ over the set of real numbers.

3. Evaluate $\sqrt{x - 3x}$ over the set of real numbers if $x = 1$.

4. Evaluate $\frac{x}{x^2 - 9}$ over the set of real numbers if $x = -3$.