

Diagnostic #1

Operations on Real Numbers

Addition

Sum of a positive and a negative number: $5 + (-8) =$; $-3 + 7 =$

Sum of two negative numbers: $(-5) + (-8) =$; $-3 + (-7) =$

Subtraction

Difference for two positive numbers: $5 - 12 =$; $12 - 5 =$

Difference for a positive and a negative number: $5 - (-12) =$; $(-12) - 5 =$

Difference for two negative numbers: $(-5) - (-12) =$; $(-12) - (-5) =$

Multiplication

Product of a positive and a negative number: $(5)(-3) =$; $(-3)(5) =$

Product of two negative numbers: $(-5)(-3) =$; $(-3)(-5) =$

Order of Operations

$$8 + (2)(4^2) \div (7 + 1) =$$

Removal of Parentheses and Simplification

$$5w + 8x - 3w + 7x =$$

$$8 + 2(x - 5) =$$

$$3m - (6 + 2m) =$$

$$8Z - 5(4 - Z) =$$