

operations on positive and negative numbers

Addition

Positive + Positive = Positive

$$5 + 3 = 8$$

Negative + Negative = Negative

$$(-5) + (-3) = -8$$

* Positive + Negative or Negative + Positive

$$(-5) + 3 = -2$$

- subtract the smaller number from the larger number, then use the sign of the larger number in the answer

$$3 + (-5) = -2$$

$$(-3) + 5 = 2$$

$$5 + (-3) = 2$$

Subtraction

Negative - Positive = Negative

$$(-5) - 3 = (-5) + (-3) = -8$$

Positive - Negative = Positive

$$5 - (-3) = 5 + 3 = 8$$

* Negative - Negative = Negative + Positive

$$(-5) - (-3) = (-5) + 3 = -2$$

- treat as Negative + Positive
- subtract the smaller number from the larger number, then use the sign of the larger number in the answer

$$(-3) - (-5) = (-3) + 5 = 2$$

Multiplication

Positive x Positive = Positive

$$5 \times 3 = 15$$

Negative x Negative = Positive

$$(-3) \times (-5) = 15$$

Negative x Positive = Negative

$$(-3) \times 5 = -15$$

Positive x Negative = Negative

$$3 \times (-5) = -15$$

- change double negatives to a positive

Division

Positive ÷ Positive = Positive

$$15 \div 3 = 5$$

Negative ÷ Negative = Positive

$$(-15) \div (-3) = 5$$

Negative ÷ Positive = Negative

$$(-15) \div 3 = -5$$

Positive ÷ Negative = Negative

$$15 \div (-3) = -5$$

- change double negatives to a positive

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