

Name: _____

Positive and Negative Integers with Operations

Adding Rules:

Positive + Positive = Positive

$$5 + 4 = 9$$

Negative + Negative = Negative

$$(-7) + (-2) = -9$$

Sum of a negative and a positive number

$$(-7) + 4 = -3$$

$$6 + (-9) = -3$$

Use the sign of the larger number and subtract

$$(-3) + 7 = 4$$

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

Subtracting Rules:

Negative - Positive = Negative

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

Positive - Negative = Positive + Positive =
Positive

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

Negative - Negative = Negative + Positive =

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

Use the sign of the larger number and subtract
(Change double negatives to a positive shown in red.)

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

Multiplying Rules

Positive x Positive = Positive

$$3 \times 2 = 6$$

Negative x Negative = Positive

$$(-2) \times (-8) = 16$$

Negative x Positive = Negative

$$(-3) \times 4 = -12$$

Positive x Negative = Negative

$$3 \times (-4) = -12$$

Dividing Rules

Positive ÷ Positive = Positive

$$12 \div 3 = 4$$

Negative ÷ Negative = Positive

$$(-12) \div (-3) = 4$$

Negative ÷ Positive = Negative

$$(-12) \div 3 = -4$$

Positive ÷ Negative = Negative

$$12 \div (-3) = -4$$