

CHAPTER 6 STUDY

POSITIVE AND NEGATIVE INTEGERS

Adding Rules: Positive + Positive = Positive: $5 + 4 = 9$

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

Sum of a negative and a positive number: Use the sign of the larger number and subtract

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

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

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

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

Subtracting Rules: Negative - Positive = Negative: $(-5) - 3 = -5 + (-3) = -8$

Positive - Negative = Positive + Positive = Positive: $5 - (-3) = 5 + 3 = 8$

Negative - Negative = Negative + Positive = Use the sign of the larger number and subtract (*Change double negatives to a positive*)

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

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

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 \div Positive = Positive: $12 \div 3 = 4$

Negative \div Negative = Positive: $(-12) \div (-3) = 4$

Negative \div Positive = Negative: $(-12) \div 3 = -4$

Positive \div Negative = Negative: $12 \div (-3) = -4$