

## Unit 1 Day 2

### 1-2 Combining Signs

Two or more integers can be linked by positive and negative signs.

ex.  $-2-7+3-12+6$

These can be arranged in any order provided the sign stays with the #.

ex.  $-4+6-3 = -3-4+6 = -3+6-4 = 6-3-4$

what about  $5--3?$  =  $5+3$

Rule: When you have multiple signs in succession, count the # of negatives. If **even** # of negative, replace with a single **(+)**. If **odd**, replace with a single **(-)**.

ex.  $-5+-4 = -5-4 = -9$

$-5-+4 = -5-4 = -9$

$-5-~~-~~4 = -5+4 = -1$

$-5-+-4 = -5++4 = -1$

Practice: 1)  $7-(-2)+(-3)-(+4)$

$7+2-3-4$

$= 2$

2)  $3-(+1)-(-5)+(-7)$

$3-1+5-7$

$2+5-7$

$= 0$

3)  $-4-(-5)+(-6)-(+4)$

$-4+5-6-4$

$1-6-4$

$-5-4$

$= -9$

## Adding + Subtracting Integers

Signs are same

Add

$$-5 - 4 = -9$$

$$5 + 7 = 12$$

$$-8 - 5 = -13$$

Signs are different

Subtract

$$8 - 3 = 5$$

$$4 - 5 = -1$$

$$3 - 10 = -7$$

\* Answer takes sign of the largest absolute value.

Practice:

$$\begin{aligned} 1) & (-8 - -3) - (2 + -7) \\ & (-8 + 3) - (2 - 7) \\ & (-5) - (-5) \\ & -5 + 5 \\ & = 0 \end{aligned}$$

$$\begin{aligned} 2) & -(3 + -7) - (2 + -4 - -5) \\ & -(3 - 7) - (2 - 4 + 5) \\ & -(-4) - (3) \\ & 4 - 3 \\ & = 1 \end{aligned}$$