

Warm - Up
Sept. 27, 2018

Count the number of operations, order,
then simplify

$$-4(2) + -6 + 6(-1)$$

Handwritten annotations: The number 1 is circled in orange with an arrow pointing to the coefficient -4. The number 3 is circled in orange with an arrow pointing to the plus sign between -4(2) and -6. The number 4 is circled in orange with an arrow pointing to the coefficient 6. The number 2 is circled in orange with an arrow pointing to the coefficient -1.

$$-8 + -6 + 6(-1)$$

$$-8 + -6 + -6$$

$$-14 + -6$$

$$\boxed{-20}$$

Adding two integers with Different Signs

p.15

Procedure – Adding Two Integers with Different Signs

1. Subtract the smaller absolute value from the larger.
2. Attach the original **sign** of the number that had the **larger** absolute value.

Simplify

1) $-10 + 4$

1. $10 - 4 = 6$

2. -6

2) $3 + -4$

$4 - 3 = 1$

-1

3) $-4 + 12$

1. $12 - 4 = 8$

2. $+8$

4) $-10 + 12$

1. $12 - 10 = 2$

2. 2

Count the number of operators, discuss the order of the operations and then simplify.

$$\begin{array}{c} \textcircled{1} \quad \textcircled{2} \\ (-6 + 3) + -1 \\ \underbrace{-6 + 3}_{6 - 3} \\ -3 + -1 \end{array}$$

$$\text{♥} \quad -4$$



Count the number of operators, discuss the order of the operations and then simplify.

$$\begin{array}{ccccccc} & \downarrow & \downarrow & \overline{\uparrow} & & \downarrow & \\ -10 & + & 5 & -6 & + & 12 & \\ & & & 12 + 5 = 17 & & & \\ & & & -10 + -6 = -16 & & & \\ & & & 17 + -16 = -4 & & & \end{array}$$

$$\begin{array}{ccccccc} -10 & + & 5 & + & -2 & + & -4 & + & 12 \\ & & \uparrow & & \uparrow & & \uparrow & & \uparrow \\ & & \textcircled{1} & & \textcircled{2} & & \textcircled{3} & & \textcircled{4} \end{array}$$

- ① + # w/same sign
- ② + # w/diff. sign

$$\checkmark \quad -5 + -2 + -4 + 12$$

$$\begin{array}{l|l} -7 + -4 + 12 & -5 + -2 + 8 \\ -11 + 12 & -7 + 8 \\ \textcircled{1} & \textcircled{1} \end{array}$$

Count the number of operators, discuss the order of the operations and then simplify.

$$\begin{array}{ccccccc} & \textcircled{1} & & \textcircled{2} & & \textcircled{3} & & \textcircled{4} \\ & \downarrow & & \downarrow & & \downarrow & & \downarrow \\ 8 & + & -12 & + & -11 & + & 4 & + & 6 \\ -4 & + & -11 & + & 4 & + & 6 \\ -15 & + & 4 & + & 6 \\ -11 & + & 6 \\ \textcircled{-5} \end{array}$$

Homework: due Tue, Oct. 2nd
p. 15 (21 - 28)