

## Adding Integers with the Same Signs

To add integers with the same sign, **ADD** their absolute values.

Give the result the same sign as the integers.

## Adding Integers with the Same Signs

Positive + Positive = Positive Answer

Negative + Negative = Negative Answer

## Adding Integers with the Same Signs

$$\#1.) -2 + -4 = -6$$

$$\#2.) +9 + +7 = 16$$

$$\#3.) -11 + -18 = -29$$

$$\#4.) -27 + (-43) = -70$$

## Adding Integers with Different Signs

To add integers with different signs, **SUBTRACT** their absolute values.

Give the result the same sign as the integer with the greater absolute value.

## Adding Integers with Different Signs

$$\#1.) -9 + 15 = 6$$

$$\#2.) 7 + (-10) = -3$$

$$\#3.) -48 + 33 = -15$$

$$\#4.) 67 + (-43) = 24$$

## 2.4 (Page 63) More on Adding Integers

Examples: Solve each expression.

$$10 + 22 + (-7) + (-31)$$

$$32 + (-7) + (-31)$$

$$25 + (-31)$$

$$-6$$

Examples: Solve each expression.

$$26 + (-5) + (-11)$$

✓

$$21 + (-11)$$

✓

$$10$$

Examples: Solve each expression.

$$-17 + 36 + (-45)$$

✓

$$19 + (-45)$$

✓

$$-26$$

Examples: Solve each expression.

$$47 + 32 + (-16)$$

$$\begin{array}{l} \checkmark \\ 79 + (-16) \\ \checkmark \\ \textcircled{63} \end{array}$$

Examples: Solve each expression.

$$-11 + 10 + (-7) + 9$$

$$\begin{array}{l} \checkmark \\ -1 + (-7) + 9 \\ \checkmark \end{array}$$

$$-8 + 9 = \textcircled{1}$$

Examples: Solve each expression.

$$28 + (-56) + 32 + (-75)$$

$$\begin{array}{c} \checkmark \\ -28 + 32 + (-75) \end{array}$$

$$\begin{array}{c} \checkmark \\ 4 + (-75) \end{array}$$

$$\begin{array}{c} \checkmark \\ \textcircled{-71} \end{array}$$

## Combining Like Terms

**Terms** - the parts that are being added or subtracted

**Coefficient** - the number in front of the variable

**Like Terms** - MUST have the same variable(s)

For Example:  $5y$  &  $-3y$

~~$2y$  &  $9x$~~

**Constant Terms** - numbers without variables

Simplify each expression:

$$21y + (-30y) + 15y$$

$$-9y + 15y$$
$$6y$$

Simplify each expression:

$$67m + (-52m) + (-34m)$$

$$15m + (-34m)$$
$$-19m$$

Simplify each expression:

$$-4x + (-8x) + (-41x)$$

$$-12x + (-41x)$$

$$-53x$$

Simplify each expression:

$$5x + (-21x)$$

$$-16x$$



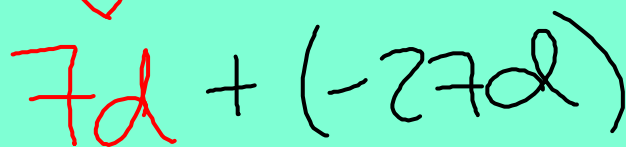
Simplify each expression:

$$-12y + 5y$$


$$-7y$$

Simplify each expression:

$$16d + (-9d) + (-27d)$$


$$7d + (-27d)$$


$$-20d$$

Simplify each expression:

$$-4f + (-6f) + (-19f)$$

$$-10f + (-19f)$$

$$-29f$$

Simplify each expression:

$$-14g + (-15g) + 26g + 7$$

$$-29g + 26g + 7$$

$$-3g + 7$$

## Attachments

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2.4 More on Adding Integers and Combining Like Terms.notebook

2.4 Simplifying Expressions with Like Terms.notebook