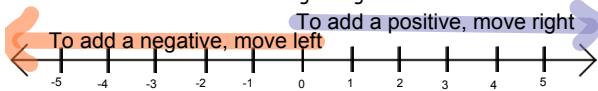


7th Grade  
2.1 Adding Integers



**Add Integers with the Same Sign**

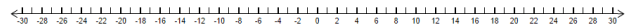
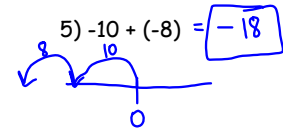
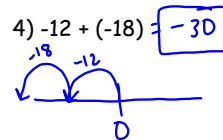
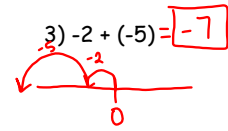
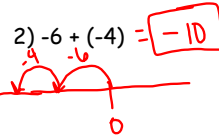
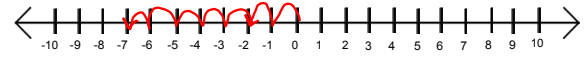
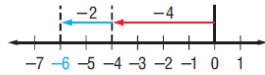
1) Find  $-4 + (-2)$ .



$-6$

**Method:** Use a number line.

- Start at zero.
- Move 4 units left.
- From there, move 2 units left.



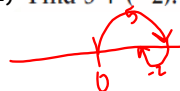
**Try this:** Use a number line to find the sum.



- 1)  $-3 + -6 = -9$       2)  $-1 + (-8) = -9$       3)  $-2 + (-5) = -7$

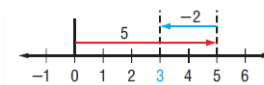
**Add Integers with Different Signs**

1) Find  $5 + (-2)$ .



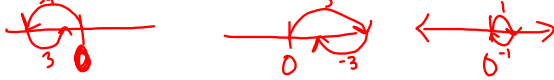
**Method:** Use a number line.

- Start at zero.
- Move 5 units right.
- From there, move 2 units left.





2) Find  $-4 + 3 = -1$     3)  $5 + (-3) = 2$     4)  $1 + (-1) = 0$



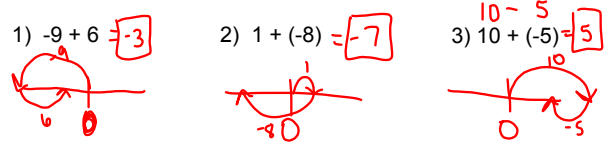
5)  $-10 + 4 = -6$



6)  $24 + (-4) = 20$



Try this: Use a number line to find the sum.



You Try: Both types mixed, use a number line.



1)  $-4 + (-5) = -9$     4)  $-6 + (-10) = -16$

2)  $10 + (-6) = 4$     5)  $18 + (-5) = 13$

3)  $-3 + 2 = -1$     6)  $-15 + (-15) = -30$

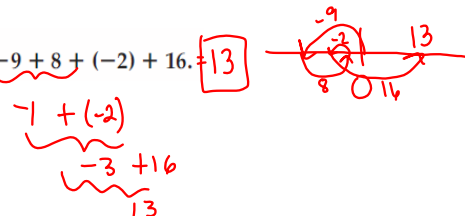
More than 2 numbers



Find  $-4 + (-12) + 4 = -12$



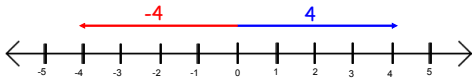
Find  $-9 + 8 + (-2) + 16 = 13$



## Opposites and Additive Inverses

opposites - same distance from 0 on a number line but on opposite sides of 0.

ex) 4 and -4



2 integers that are opposites are also called additive inverses

The sum of a number and its opposite is always 0  
ex)  $3 + (-3) = 0$

# Homework

pg 123; 12-26 even  
extra credit: 28, 30

1) What is the additive inverse of -6?  $6$

2) What is the opposite of 12?  $-12$