

# Integers

Natural/Counting Numbers

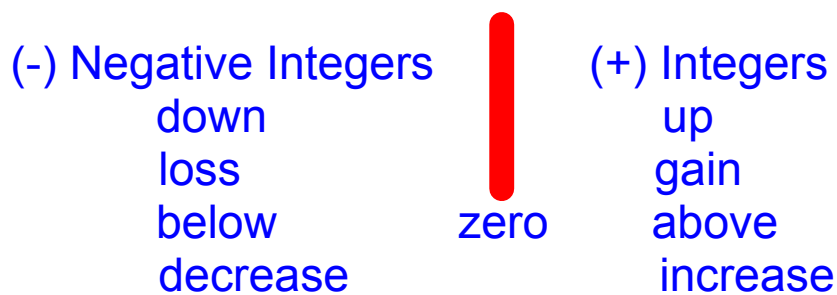
1, 2, 3, 4, 5, etc...

Whole Numbers

0, 1, 2, 3, 4, 5, etc...

Integers

...-4, -3, -2, -1, 0, 1, 2, 3, 4...



Every integer has an opposite

-3 is the opposite of +3

4 is the opposite of -4

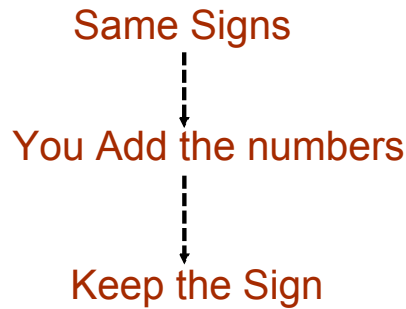
Which is greater??

a) +4 or +7      b) -2 or +3

c) 0 or +2      d) 0 or -6

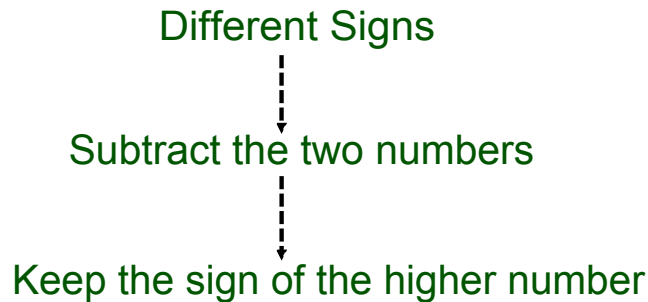
e) -10 or -3

# Adding Integers



Examples...

1.  $(+4) + (+2) = (+6)$
2.  $(-3) + (-6) = (-9)$



Examples...

1.  $(-7) + (+4) = (-3)$     ie:  $7 - 4 = 3$  ( $-7$  is the higher number  
∴ answer is  $-3$ )
2.  $(-2) + (+6) = (+4)$     ie:  $6 - 2 = 4$  ( $+6$  is the higher  
number ∴ answer  
is  $+4$ )

## Addition Rules...

$$\begin{aligned} (+) + (+) &= (+) \\ (-) + (-) &= (-) \end{aligned}$$

$$\begin{aligned} (-) + (+) &= \\ (+) + (-) &= \end{aligned}$$

Take the sign of  
the higher # and  
subtract the two  
#'s

## Subtracting Integers

Add the opposite of the second # and following addition rules

ie:  $(+3) - (+8) =$   
 $(+3) + (-8) = (-5)$



- Change the subtraction sign to addition
- Take the opposite of the second #
- Follow addition rules

ie:  $(-5) - (-7) =$   
 $(-5) + (+7) = (+2)$

ie:  $(+6) - (-12) =$   
 $(+6) + (+12) = 18$

ie:  $(-4) - (+10) =$   
 $(-4) + (-10) = (-14)$

