

The Rules

It can all be put into **two rules:**

Rule		Example
$+(+)$ $- (-)$	Two like signs become a positive sign	$3+(+2) = 3 + 2 = 5$ $6-(-3) = 6 + 3 = 9$
$+(-)$ $-(+)$	Two unlike signs become a negative sign	$7+(-2) = 7 - 2 = 5$ $8-(+2) = 8 - 2 = 6$



They are "like signs" when they are like each other (in other words: the same)

Another Common Sense Explanation:

A friend is +, an enemy is –

$+ + \Rightarrow +$	a friend of a friend is my friend
$+ - \Rightarrow -$	a friend of an enemy is my enemy
$- + \Rightarrow -$	an enemy of a friend is my enemy
$- - \Rightarrow +$	an enemy of an enemy is my friend

Practice Work at Home

1. Find the sum of (Q-3.E.x-3.2)

- (a) 137 and – 354
- (b) – 52 and 52
- (c) – 312, 39 and 192
- (d) – 50, – 200 and 300

2. Find the value of (Q-4.E.x-3.2)

- (a) $(-7) - 8 - (-25)$
- (b) $(-13) + 32 - 8 - 1$

$$(c) (-7) + (-8) + (-90)$$

$$(d) 50 - (-40) - (-2)$$

$$(e) (-7) + (-9) + 4 + 16$$

$$(f) (37) + (-2) + (-65) + (-8)$$

3. Fill in the blanks with $>$, $<$ or $=$ sign. (Q-11.E.x-3.3)

$$(a) (-3) + (-6) \underline{\hspace{1cm}} (-3) - (-6)$$

$$(b) (-21) - (-10) \underline{\hspace{1cm}} (-31) + (-11)$$

$$(c) 45 - (-11) \underline{\hspace{1cm}} 57 + (-4)$$

$$(d) (-25) - (-42) \underline{\hspace{1cm}} (-42) - (-25)$$

4. Fill in the blanks. (Q-12.E.x-3.3)

$$(a) (-8) + \underline{\hspace{1cm}} = 0$$

$$(b) 13 + \underline{\hspace{1cm}} = 0$$

$$(c) 12 + (-12) = \underline{\hspace{1cm}}$$

$$(d) (-4) + \underline{\hspace{1cm}} = -12$$

$$(e) \underline{\hspace{1cm}} - 15 = -10$$

