Integer Rules

Let's look at some strategies that might help you remember the rules for adding, subtracting, multiplying and dividing integers.

Ms. Tully

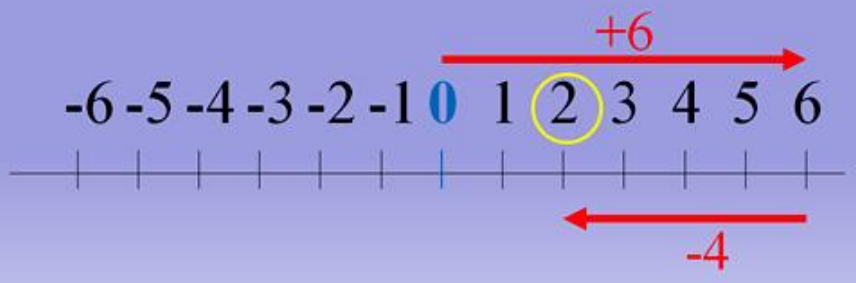
Click on this box to access a video which demonstrates:

Strategies for adding integers

Adding Integers

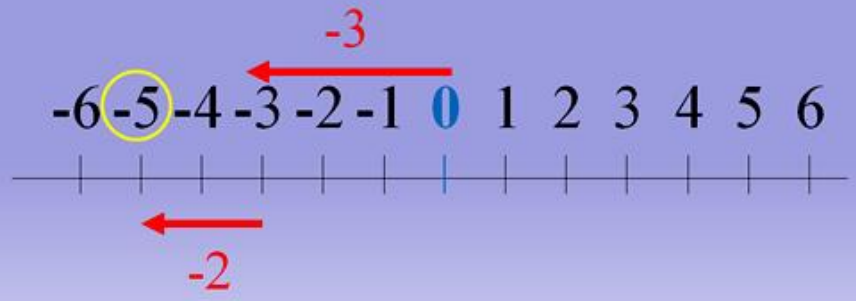
Add Integers Using a Number Line

$+6 + -4 = +2$ ✓

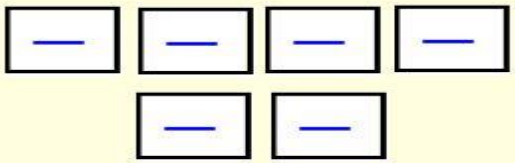


Add Integers Using a Number Line

$-3 + -2 = -5$ ✓

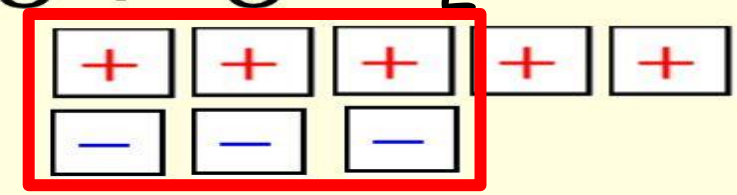


$-4 + -2 = -6$



Note: Zero pairs cancel out one another

$5 + -3 = 2$



Click on this box to access a video which demonstrates:

Strategies for subtracting integers

Subtracting Integers

Subtracting Integers:

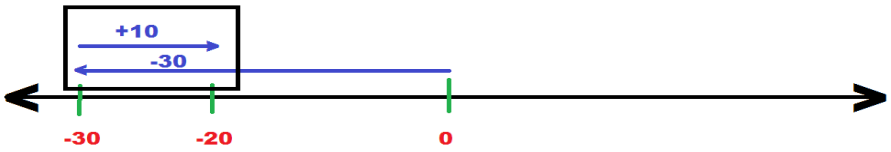
keep change change — *then use the rules for adding*

a) $4 - 7 = 4 + {}^{-}7 = {}^{-}3$

b) $-1 - 9 = -1 + {}^{-}9 = -10$

c) $-3 - (-5) = -3 + (+5) = 2$

(-30) - (-10) = (-30) + (+10)= (-20)



Click on this box to access a video which demonstrates:

Multiplying and dividing integers using three different strategies

Tic-tac-toe Strategy

P	N	N
N	P	N
N	N	P

+	−	−
−	+	−
−	−	+

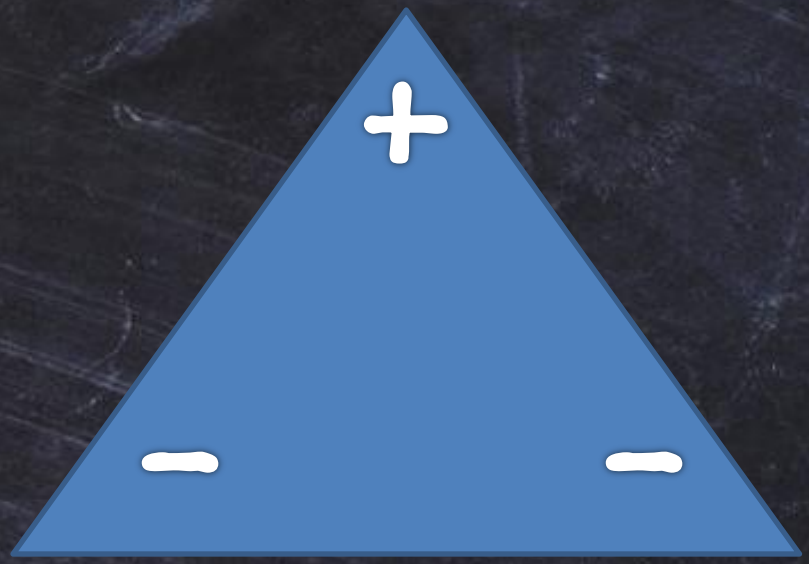
Click on either tic-tac-toe board to access a video that demonstrates this strategy for remembering the multiplication and division integer rules.

Triangle Strategy

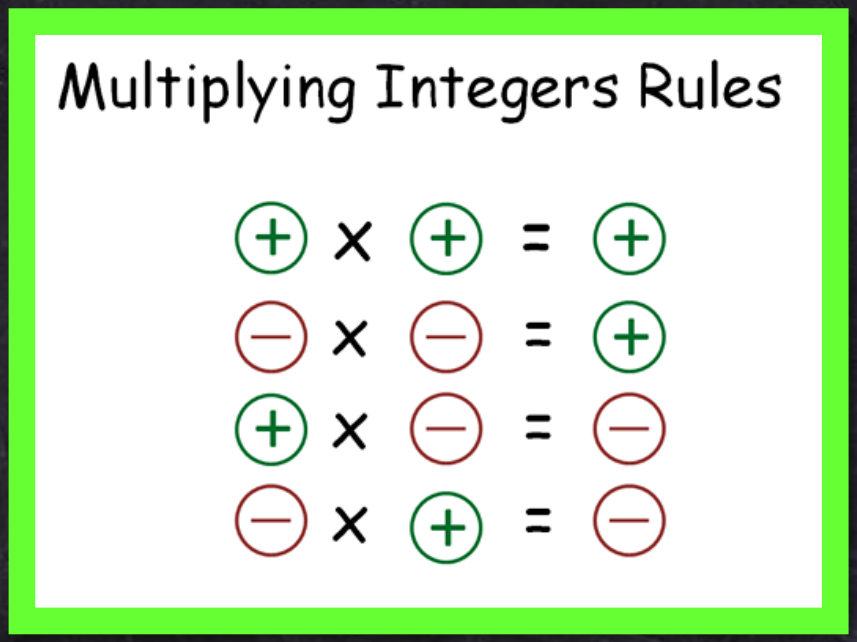
Click on the triangle above to access a video that demonstrates this strategy for remembering the multiplication and division integer rules.

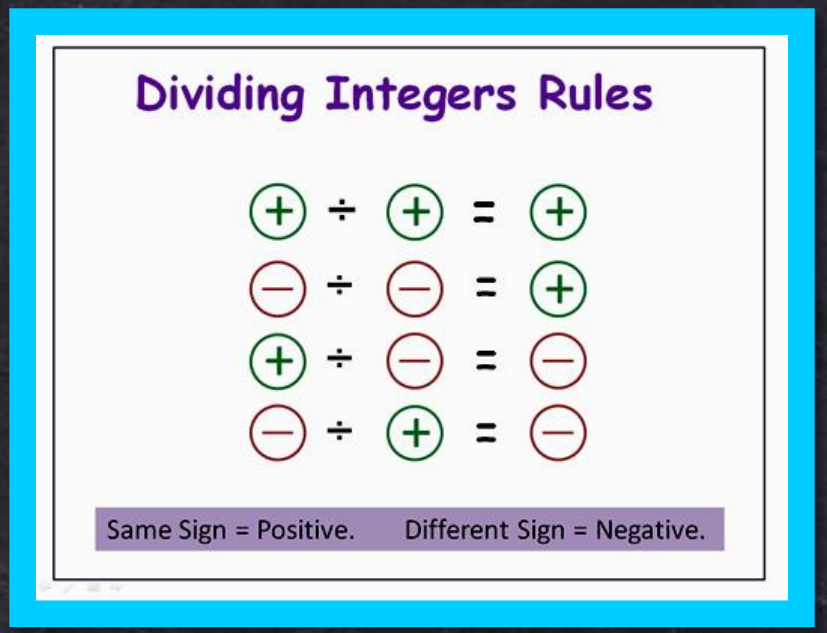
Tic-tac-toe and Triangle Strategies

N	N	P
N	P	N
P	N	N



Click on either the tic-tac-toe board or the triangle to access a video that demonstrates both strategies for remembering the multiplication and division integer rules.





Do these rules look familiar?
They are exactly the same!
You can use the same rules for multiplying and dividing integers!

Remember This Sign Rule When Multiplying Integers:

EVEN – if there are an **even** number of negative integers, the answer will be **positive**.

ODD – if there are an **odd** number of negative integers, the answer will be **negative**.

(-2)(4)(-10)(3)
(-8)(-30)
240

* count the negatives
* there are two
* two is an even number, so the answer is positive

(-2)(4)(-10)(-3)
(-8)(30)
-240

* count the negatives
* there are three
* three is an odd number, so the answer is negative

Click here to watch a video explanation