

Warm up:

$$1) |4| = 4$$

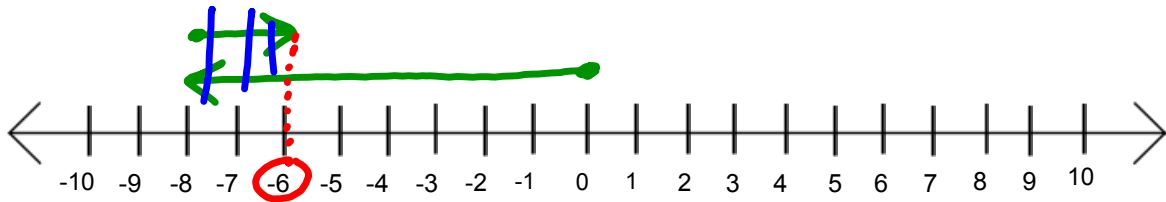
$$2) |-12| = 12$$

$$3) |-3.77| = 3.77$$

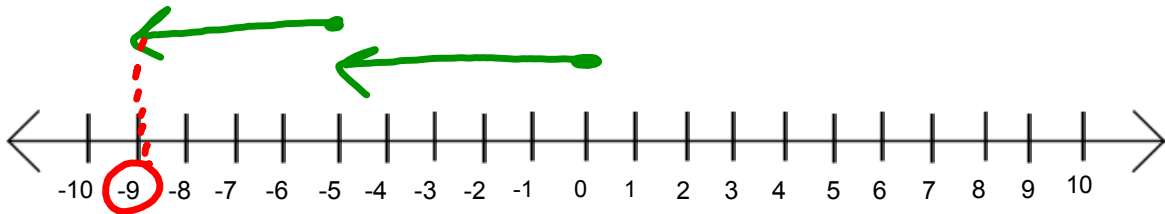
$$|0| = 0$$

AddSubtractAbsVal.gsp

$-8 + 2$



$-5 + (-4)$



Addition

When adding two positives...just add.


$$5 + 3 = 8$$

When adding two negatives...add the absolute values and make the sum negative.

$$|-2| = 2$$

$$|-5| = 5$$

$$2 + 5 = 7$$

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


When adding two numbers of different signs...subtract the absolute values and take the sign of the number with the larger absolute value.

$$|-5| = 5$$

$$|14| = 14$$

$$14 - 5 = 9$$

$$-5 + 14 = 9$$


A collection of handwritten arithmetic problems and their solutions. The problems are arranged vertically. The solutions are circled in green. Green arrows point from the solutions back to the equations. A large blue bracket on the right side groups the first four equations together, and another blue bracket on the right side groups the last three equations together.

$-3 + (-7) = -10$

$-4 + (-12) = -16$

$-5 + 8 = 3$

$9 + (-4) = 5$

$-1 + 6 = 5$

$-10 + 3 = -7$

Showdown

$$-5 + (-9)$$
$$-14$$

$$\frac{-7+1}{-6}$$

$$4 + (-10)$$

$$\textcircled{-6}$$

$$-5 + (-5)$$

$$-10$$

$$9 + (-2)$$

$$\textcircled{7}$$

Subtraction

Subtraction is the same as ADDING the OPPOSITE.

$$2 - 6 = 2 + (-6) = -4$$

$$-2 - 7 = -2 + (-7) = -9$$

$$4 - (-3) = 4 + 3 = 7$$

$$-5 - (-9) = -5 + 9 = 4$$

$$1) 5 + (+8) = 13$$

$$2) -3 + (+4) = 1$$

$$3) 5 + (-12) = -7$$

$$4) -2 + 8 = 6$$

$$5) -10 + (-19) = -29$$

$$6) -3 - 9 = -3 + (-9) = (-12)$$

$$7) 4 - 13 = 4 + (-13) = (-9)$$

$$-7 - (-4)$$

$$-7 + 4$$

$$\textcircled{-3}$$

Showdown

$$-3 - 1$$

$$-3 + (-1)$$

$$\textcircled{-4}$$

$$-7 + (-5)$$
$$\textcircled{-12}$$

$$-6 - (-5)$$

$$-6 + 5$$

$$\textcircled{-1}$$

$$9 - (-2)$$

$$9 + 2$$

$$\underline{11}$$

$$\begin{array}{l} 2 - 10 \\ 2 + (-10) \\ \underline{-8} \end{array}$$