

Warm up:

$$|0| = 0$$

$$1) |4| = 4$$

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

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

 AddSubtractAbsVal.gsp




# Addition

When adding two positives...just add.

$$5 + 3 = 8$$

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

$$\begin{array}{l} | -2 | = 2 \\ | -5 | = 5 \\ 2 + 5 = 7 \end{array} \quad -2 + (-5) = -7$$


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

$$\begin{array}{l} | -5 | = 5 \\ | 14 | = 14 \\ 14 - 5 = 9 \end{array} \quad -5 + 14 = 9$$


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



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



$$-5 + 8 = 3$$



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



$$-1 + 6 = 5$$



$$-10 + 3 = -7$$



## Subtraction

Subtraction is the same as ADDING the OPPOSITE.

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

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

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

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

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

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

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

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

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

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

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

# Showdown

$$-3 - (-6)$$

$$-3 + 6$$

$$\textcircled{3}$$



$$4 + (-15)$$
$$-11$$

$$\begin{array}{c} -2 + 2 \\ 0 \end{array}$$

$$-7 + (-1)$$
$$\underline{-8}$$

$$\begin{array}{r} -5 - 2 \\ -7 \end{array}$$

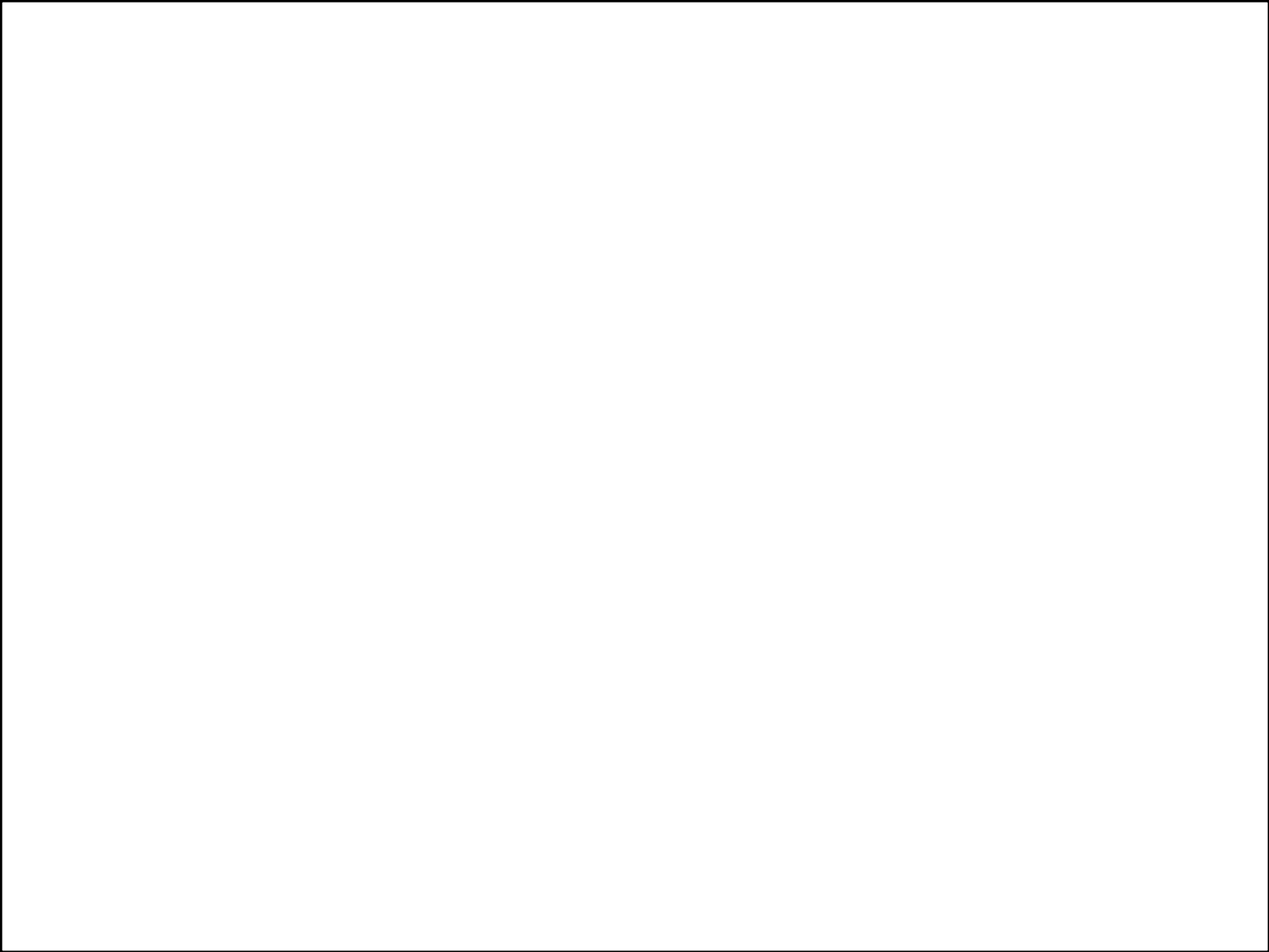
$$\frac{-3 - (-5)}{2}$$

$$4 + \underline{(-11)}$$

$$\textcircled{-7}$$

$$6 + (-2)$$

④





# Multiplication and Division

same sign - positive

different signs - negative

$$5(-3) =$$

$$-15$$

$$-6(-2) =$$

$$12$$

$$-4(4) =$$

$$-16$$

$$\frac{14}{-2} = -7$$

$$\frac{-24}{-3} = 8$$

$$\frac{-40}{2} = -20$$

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