

Mixed Up Operations

Learning Goal:

By the end of this lesson I should be able to EVALUATE mixed addition and subtraction problems WITHOUT the use of a calculator (technology).

SUM -> ADD -> Total

(Similar meaning)

Difference -> Subtract -> Take Away

EVALUATE - find the number answer
(can involve both adding and subtracting)

Big Ideas!!!!

Subtracting a positive number gives the same result as adding a negative number.

$$9 - 5 \quad \text{is the same as} \quad 9 + (-5)$$

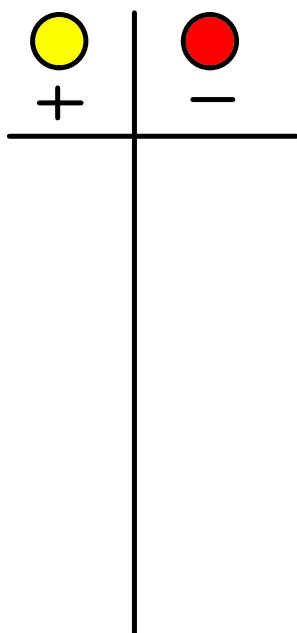
Subtracting a negative number gives the same result as adding a positive number.

$$5 - (-3) \quad \text{is the same as} \quad 5 + 3$$

Evaluate the following:

$$(-13) - 14$$

(thirteen negative chips, take away fourteen positive chips)



Number Model

$$(-13) - 14$$

$$= (-13) + (-14)$$

$$= (-10) + (-3) + (-10) + (-4)$$

$$= (-20) + (-7)$$

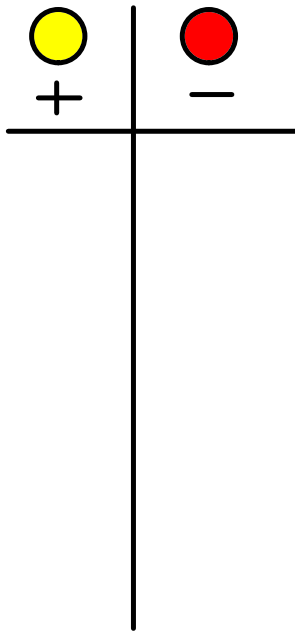
$$= (-27)$$

Big Idea

Evaluate the following:

$$24 - (-11) + (-7)$$

(twenty-four positive chips, take away eleven negative chips), plus seven negative chips



Number Model

$$\begin{aligned} & 24 - (-11) + (-7) \\ & = 24 + 11 + (-7) \quad \text{Big Idea} \\ & = 20 + 4 + 10 + 1 + (-7) \\ & = 30 + 5 + (-5) + (-2) \\ & = 30 + (-2) \\ & = 28 \end{aligned}$$

Press PAUSE on the video and try the following

Evaluate the following:

$$1. \quad 4 - (-6) + 2 = 12$$

$$2. \quad (-12) - (-3) + 18 = 9$$

$$3. \quad 26 - (-10) - (-8) = 44$$

$$4. \quad (-45) + (-13) - (-9) = -49$$

Task - 1.8

Attachments

Math - task1 - add-sub integers.doc