

Unit 2: Integers

Name: _____

2.5: Subtracting Integers on a Number Line

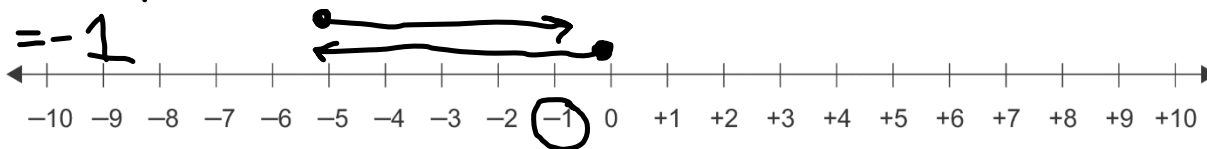
Instead of Subtracting
Keep Change Change

1. Use a number line to subtract.

a) $(-5) - (-4)$

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

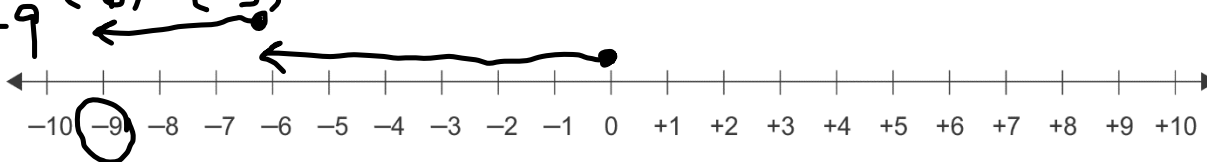
$= -1$



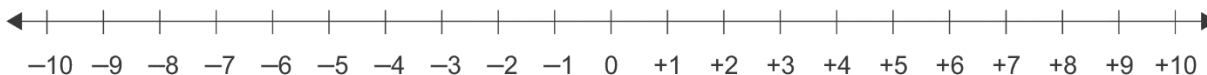
b) $(-6) - (+3)$

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

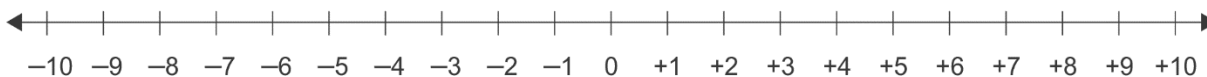
$= -9$



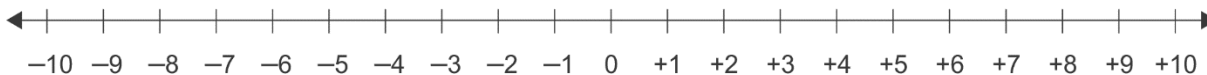
c) $(+8) - (+12)$



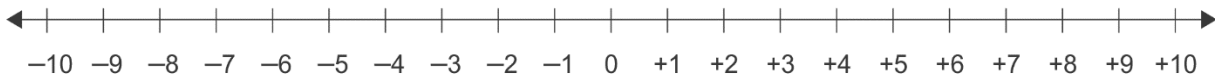
d) $(+7) - (+2)$



e) $(-3) - (+5)$



f) $(-7) - (-8)$



2. Use patterns to subtract.

a) $(+4) - (-3)$

b) $(-2) - (+5)$

c) $(+5) - (+8)$

3. Find the difference between:

- a) Mount Everest, Nepal, at 8850 m above sea level and Java Trench, Indian Ocean, 7125 m below sea level

$$\begin{aligned} & (+8850) - (-7125) \\ & = (+8850) + (7125) = 15\,975\text{m} \end{aligned}$$

$$\begin{array}{r} 8850 \\ +7125 \\ \hline 15975 \end{array}$$

- b) Puerto Rico Trench, Atlantic Ocean at 8648 m below sea level and Java Trench, Indian Ocean, 7125 m below sea level

- c) An airplane cruising at an altitude of 3500 m and a submarine at a depth 975 m

- d) A kite at an altitude of 112 m and a bird at an altitude of 145 m

4. The difference between $(+56)$ and $(+45)$ is -11 .

- a) Write the subtraction statement.

- b) Write another subtraction statement using two negative integers with this difference.

- c) Write another subtraction statement using a positive integer and a negative integer with this difference.