

# Subtracting Integers

Can you model the following situations?

1)  $5 - 3 = 2$

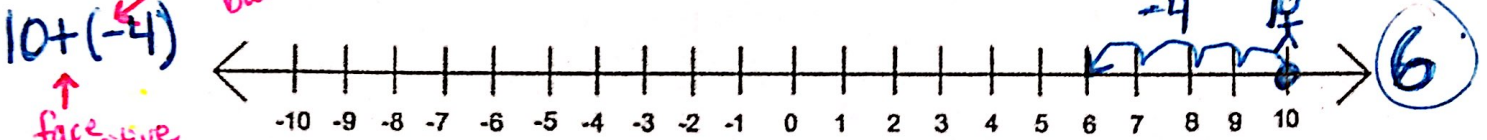
2)  $-9 - (-3) = -9 + 3 = -6$

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

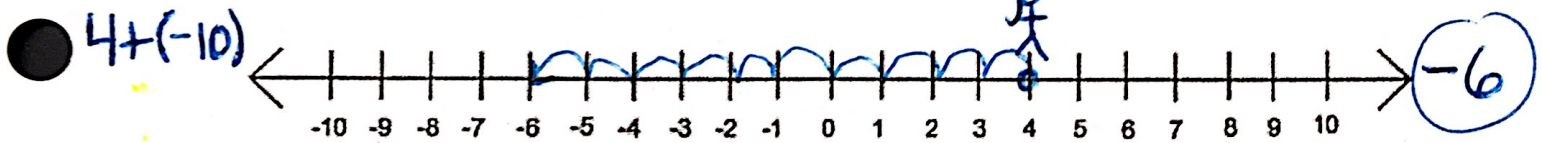
"take away debt"

Use the number line to find the difference:

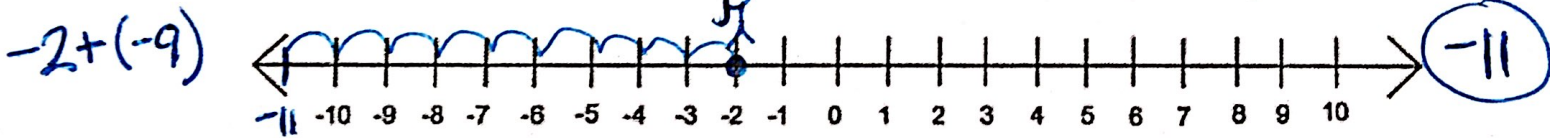
1)  $10 - 4$  *walk backwards*



3)  $4 - 10$

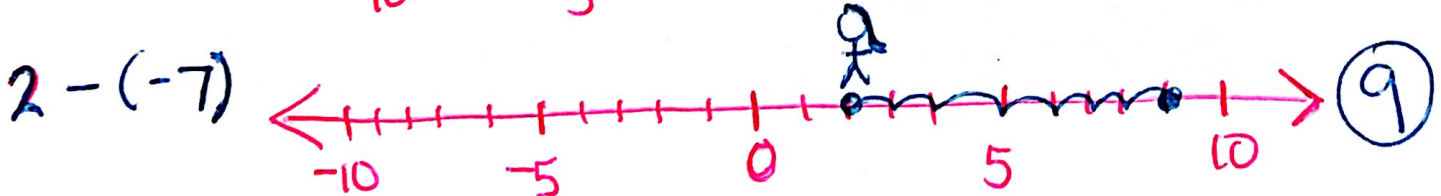
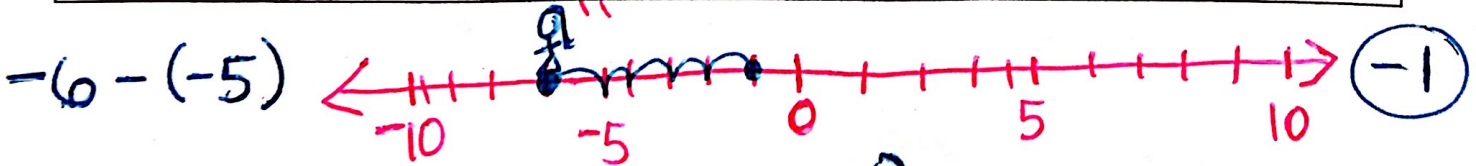


4)  $-2 - 9$



Do you notice anything?

	RULE	EXAMPLE
Subtraction	to subtract an integer, add the opposite.	$3 - 7 = 3 + (-7)$ $a - b = a + (-b)$



Find the difference using the rules for integer subtraction:

1)  $7 - (-5)$

2)  $-2 - (-7)$

3)  $8 - (-5)$

4)  $5 - |x|$  when  $x = 4$

5)  $x - y$  when  $x = 6$  and  $y = 10$

6)  $-6 - 3$

7)  $-5 - (-15)$

8)  $-7 - 5$

9)  $1 - 10$

Same Sign Keep and Add,

Different Sign Subtract,

Take the Sign of the "Bigger" Number,

Then You'll be Exact!

**Assignment:** Page 36 #12 - 31 Challenge: Page ~~36~~ #39-46 (Extra Credit)

Modified: Page 36 #12 - 30 (evens)