

Do Now:

1.) $124 - 35 = 89$ $\begin{array}{r} 124 \\ -35 \\ \hline 89 \end{array}$

2.) $17 - 17 = 0$

3.) $18 - (-21) + 39 = 36$

4.) $-11 + (-9) + (-23) + 19 + (-12) = -36$

$-55 + 19 = -36$

$\begin{array}{r} 23 \\ +12 \\ \hline 35 \\ +9 \\ \hline 44 \\ +11 \\ \hline 55 \end{array}$ } -55

Sep 28-9:08 AM

Answers to Worksheet 2.2

- | | |
|------------------|-----------------------------------|
| 1. $-4 + 11 = 7$ | 14. never |
| 2. 1 | 15. never |
| 3. -5 | 16. never |
| 4. -9 | 17. sometimes |
| 5. 9 | 18. -13 |
| 6. -17 | 19. -9 |
| 7. -97 | 20. -30 |
| 8. -7 | 21. -140 |
| 9. 9 | 22. \$227 |
| 10. -41 | 23. -2; finished 2 seconds behind |
| 11. -43 | |
| 12. -68 | |
| 13. -121 | |

Correct
23

Sep 29-7:13 AM

2.3 Subtracting Integers7.NS.1
7.EE.1

- SWBAT subtract integers.
- SWBAT understand numbers and understand meanings of operations.

Calculators: No

Sep 18-5:52 PM

Subtracting Integers

To subtract integers, add its opposite

• Ex: $a - b = a + (-b)$

• Ex: $3 - 7 = 3 + (-7) = -4$

Sep 22-7:45 PM

Christian owed \$200 on his credit card. He made another purchase of \$20. How much does he now owe?

$$-200 - 20$$

$$-200 + (-20)$$



Sep 18-5:55 PM

$$-200 - 20$$

Steps to solve:

SAME

1. Leave the first number alone.

CHANGE

2. Change the minus sign to a plus

OPPOSITE

3. Use the OPPOSITE of the second number

$$-200 - 20$$

$$-200 + 20$$

$$-200 + (-20)$$


Sep 22-8:56 PM

Think...
Isn't taking away \$20 the same thing as adding -\$20

$-200 - 20$ $-200 + (-20)$

I started the account with -200 and then took away 20 more dollars

She started the account with -200 and then added another -20 debt.



Sep 22-9:41 PM

SAME **CHANGE** **OPPOSITE**

$-12 - 15$

$-12 + (-15)$

Same Sign (neg)

15
 $+12$

 27

-27

Sep 22-9:11 PM

SAME **CHANGE** **OPPOSITE**

$10 - (-90)$

$10 + 90$

Same Sign (pos)

90
 $+10$

 100

100

Sep 18-6:00 PM

SAME **CHANGE** **OPPOSITE**

$25 - 34$

$25 + (-34)$

Diff. Sign (neg)

34
 -25

 9

-9

Sep 18-6:02 PM

SAME **CHANGE** **OPPOSITE**

$-100 - 37$

$-100 + (-37)$

Same Signs (neg)

100
 $+37$

 137

-137

Sep 18-6:02 PM

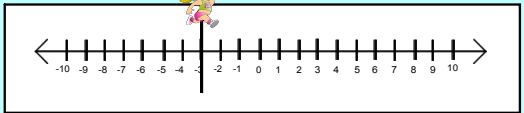
$-15 - 75 - (-100)$

$-15 + -75$

$-90 + 100$

10

Sep 28-12:19 PM



To model on a number line:

You still start at 0.

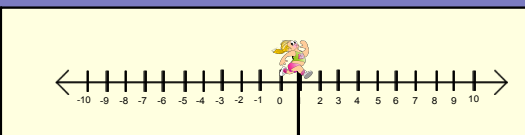
Then you go to the first number.

Think of the minus sign as meaning do the opposite of the second number.

$$-5 - (-2)$$

$$\textcircled{-3}$$

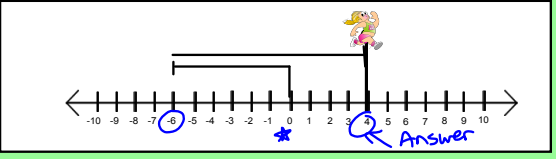
Sep 22-9:39 PM



Model

$$-8 - (-9) = \textcircled{1}$$

Sep 22-10:11 PM



What is being modeled?

$$-6 + 10 = 4$$

$$-6 - (-10) = 4$$

Sep 22-10:14 PM

Find the difference.

a. $-6 - 7$ -13

b. $7 - 15$ -8

c. $-8 - (-3)$ -5

d. $10 - (-18)$ 28

e. $\textcircled{-10 - (-525)} - 280$

$$-10 + 525$$

$$515 - 280$$

$$515 + (-280)$$

$$\textcircled{235}$$

Sep 22-10:24 PM

1 Evaluate the expression when $x = -8$ and $y = 5$

(a) $7 - x - y$

$$\textcircled{7 - (-8) - 5}$$

$$7 + 8$$

$$15 - 5$$

$$15 + (-5)$$

$$\textcircled{10}$$

Sep 28-9:45 AM

2 Evaluate the expression when $x = -8$ and $y = 5$

$x - 15 - y$

$$\textcircled{-28}$$

$$-8 - 15 - 5$$

$$-8 + (-15) \downarrow \downarrow$$

$$-23 - 5$$

$$-23 + (-5)$$

Sep 28-9:45 AM

- 3 Evaluate the expression when $x = -8$ and $y = 5$

$$x - y - 4 - 12$$

Sep 28-9:46 AM

In 1962, the summit elevation of Kick-'em Jenny was -235 meters. In 2002, the summit elevation was -182 meters. By how many meters did the elevation of the volcano change?

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Find the change in elevation of a diver who descends to -52 feet from -37 feet.

Sep 18-5:59 PM

Exit Pass 2.3

Complete the statement using *always*, *sometimes*, or *never*.

1. A negative number minus a positive number is _____ negative.
2. A positive number minus a negative number is _____ negative.
3. Explain how you'd find the difference of -45 and -60.

Sep 18-6:23 PM

"Perfect practice makes perfect."

Working individually or with a partner, complete the worksheet.



Sep 18-6:23 PM

Reflection of Today's Lesson

2.3 Subtracting Integers

7.NS.1

7.EE.1

SWBAT subtract integers.

SWBAT understand numbers and understand meanings of operations.

Sep 28-12:17 PM

Homework



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Quiz on Thursday 10/1

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