

Do Now

$$\begin{array}{l}
 -123 \oplus (-99) \ominus 68 \ominus (-81) \oplus 59 \\
 -123 \oplus (-99) = -222 \quad \text{Same Signs (Neg)} \\
 \begin{array}{r} 123 \quad 222 \\ +99 \quad +68 \\ \hline 222 \quad 290 \end{array} \\
 -222 \ominus 68 \\
 -222 \oplus (-68) = -290 \\
 -290 \ominus (-81) \\
 -290 \oplus 81 = -209 \\
 -209 \oplus 59 = \boxed{-150} \\
 \begin{array}{r} 290 \\ -81 \\ \hline 209 \\ \text{Diff Signs (neg)} \\ 209 \\ -59 \\ \hline 150 \end{array} \\
 \begin{array}{r} 209 \\ -59 \\ \hline 150 \end{array} \quad \text{Diff Signs (neg)}
 \end{array}$$

Sep 24-10:57 AM

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

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

Calculators: No

Sep 24-10:56 AM

Subtracting Integers

SAME	CHANGE	OPPOSITE
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To subtract integers, add its opposite

- Ex: $a - b$
 $= a + (-b)$
- Ex: $3 - 7$
 $= 3 + (-7)$
 $= -4$

Sep 24-10:57 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?

$$\begin{array}{l}
 \begin{array}{c} 1962 \quad 2002 \\ \downarrow \quad \downarrow \\ -235 \text{ m} \quad -182 \text{ m} \end{array} \quad \begin{array}{l} \text{New} - \text{Old} \\ -182 - (-235) \\ -182 \oplus 235 \\ 53 \text{ m} \end{array} \quad \begin{array}{l} \text{Diff Signs (pos)} \\ \begin{array}{r} 235 \\ -182 \\ \hline 53 \end{array} \end{array}
 \end{array}$$

Sep 26-7:09 AM

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

$$\begin{array}{l}
 \text{New} - \text{Old} \\
 -52 - (-37) \\
 -52 \oplus 37 \quad \text{Diff Sign (neg)} \\
 \boxed{-15 \text{ ft}} \\
 \begin{array}{r} 52 \\ -37 \\ \hline 15 \end{array}
 \end{array}$$

Sep 26-7:09 AM

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

$$\begin{array}{l}
 - \ominus + = - \\
 - + - = -
 \end{array}$$

1. A negative number minus a positive number is always negative.

2. A positive number minus a negative number is never negative.

$$\begin{array}{l}
 + \ominus - = + \\
 + + - = +
 \end{array}$$

3. Explain how you'd find the difference of -45 and -60.

Sep 26-7:10 AM

Exit Pass

Answer this question and turn it in to receive your worksheet

Explain what is meant by the phrase "same change opposite" as it relates to subtracting integers.



Sep 24-10:59 AM

"Don't blame the sea if you cannot catch a fish."

Classwork

- Working individually or with a partner or group of 3

#2-14 Evens Only
#20, 32, 36



#1-13 Odds Only
#19, 33, 36



Sep 24-10:58 AM

Answers to Worksheet 2.3

- | | | |
|---------------------|------------------------|---------|
| 1. -4 | 14. $8 - (-21) = 29$ | 36. D |
| 2. -15 | 15. $-15 - (-28) = 13$ | 37. -67 |
| 3. 7 | 16. 10 | |
| 4. -21 | 17. -28 | |
| 5. -5 | 18. -29 | |
| 6. -3 | 19. owes \$483 | |
| 7. 40 | 20. 47 feet | |
| 8. -14 | 30. -31 | |
| 9. -16 | 31. 15 | |
| 10. -11 | 32. 9 | |
| 11. -12 | 33. -10 | |
| 12. -95 | 34. -12 | |
| 13. $-6 - 19 = -25$ | 35. -9 | |

Sep 24-10:58 AM

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 29-10:32 AM

Homework

pg. 98 #7-20

Quiz 2.1-2.3 tomorrow!



Sep 24-11:00 AM

⑨ 22
Abs Value (always positive) $|22| = 22$
Opposite of 22 = -22

Sep 30-10:08 AM