

Subtracting Integers

I. Addition Rules

<p>Same Signs Bigger</p> <p>ex: $-3 + (-7) = -10$</p> <p><u>Add</u></p>	<p>Different Signs Bigger</p> <p>ex: $6 + (-8) = -2$</p> <p><u>Subtract</u></p>
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II. Subtraction Rule

A. Same Change Opposite

Keep the 8 the same

the subtraction of -4 to addition $(+4)$

• Rewrite the problem

$$\begin{array}{r} 8 \\ + 4 \\ \hline = 12 \end{array}$$

• Follow the addition rules.

Positive Four

ex:

Rewrite the problem

Same change opposite

Bigger

Use addition rules

Diff. Signs = Subtract

$$\begin{array}{r} -12 \\ + 7 \\ \hline = -5 \end{array}$$

$$1) \quad -6 - (-15)$$

$$\quad -6 + 15 = 9$$

$$2) \quad 4 - (-13)$$

$$\quad 4 + 13 = 17$$

- Should I use same change opposite for this problem?

$$-9 + (-8)$$

$$-9 + 8$$

$$8 + (-9)$$

No, because we only use same change opposite for subtraction problems.

ex: $-8 - (-10) - (-7)$

$-8 + 10 + 7$

$2 + 7$

9

ex: $-13 - (-8) - (-4)$

Bigger Sign $-13 + 8 + 4$

$-5 + 4$

-1

A Scuba Diver is swimming 14 ft. below sea level. She then goes down 12 ft. to look at pretty coral. Write a subtraction that models this scenario & how many feet is she now below sea level?

$$-14 - (+12)$$

