

Lesson 1.3:

Subtracting Integers

Subtraction is a **penalty!**

Blow the whistle |

Throw the flag —

$$-8 - 3 = -8 +^{-}3$$

Example 1:a. Find $3 + (-12)$.

$$3 + (-12) = -9$$

b. Find $-8 + (+13)$.

$$-8 + 13 = 5$$

c. Find $5 - (-4)$.

$$5 + 4 = 9$$

Subtract.1. $5 - 8$

$$5 + (-8) = -3$$

2. $12 - (-3)$

$$12 + 3 = 15$$

3. $-5 - (-6)$

$$-5 + 6 = 1$$

4. $-12 - (-12)$

$$-12 + 12 = 0$$

Example 2:Evaluate $-7 - (-12) + (-14)$.

$$\begin{aligned} & -7 + 12 + (-14) \\ & \quad \underline{\hspace{2cm}} \\ & \quad 5 + (-14) \\ & \quad \quad \underline{\hspace{1cm}} \\ & \quad \quad -9 \end{aligned}$$

Evaluate the expression.

5. $-9 + (-16) + (-8)$

$$\begin{aligned} & -9 + (-16) + (-8) \\ & \quad \underline{\hspace{2cm}} \\ & \quad -25 + (-8) \\ & \quad \quad \underline{\hspace{1cm}} \\ & \quad \quad -33 \end{aligned}$$

7. $0 + (-9) + 5$

$$\begin{aligned} & 0 + (-9) + 5 \\ & \quad \underline{\hspace{1.5cm}} \\ & \quad -4 \end{aligned}$$

6. $-4 + (-20) + (-9)$

$$\begin{aligned} & -4 + (-20) + (-9) \\ & \quad \underline{\hspace{2cm}} \\ & \quad -24 + (-9) \\ & \quad \quad \underline{\hspace{1cm}} \\ & \quad \quad -33 \end{aligned}$$

8. $-8 - (-6) + (-0)$

$$\begin{aligned} & -8 + 6 \\ & \quad \underline{\hspace{1.5cm}} \\ & \quad -2 \end{aligned}$$

Example 3:

Which continent has the greater range of elevations?

	<u>★ North America</u>	<u>Africa</u>
Highest Elevation	6198 m	5895 m
Lowest Elevation	-86 m	-155 m

$$6198 - (-86)$$

$$\begin{array}{r} 6198 \\ + 86 \\ \hline 6284 \end{array}$$

$$5895 - (-155)$$

$$\begin{array}{r} 5895 \\ + 155 \\ \hline 6050 \end{array}$$