

Integers Unit Test

16.

$$\begin{aligned} \text{a)} \quad (-8) - x &= (-1) \\ (-8) - x + x &= (-1) + x \\ (-8) &= (-1) + x \\ (-8) + 1 &= (-1) + x + 1 \\ (-7) &= x \end{aligned}$$

$$\begin{aligned} \text{b)} \quad 10 - 5 &= x \\ 10 + (-5) &= x \\ 5 &= x \end{aligned}$$

$$\begin{aligned} \text{c)} \quad x - (-2) &= 10 \\ x + 2 &= 10 \\ x + 2 - 2 &= 10 - 2 \\ x &= 8 \end{aligned}$$

$$\begin{aligned} \text{d)} \quad (-4) - x &= 0 \\ (-4) - x + x &= 0 + x \\ (-4) &= x \end{aligned}$$

a) Alternate Method

$$\begin{aligned} (-8) - x &= (-1) \\ (-8) - x + 8 &= (-1) + 8 \\ -x &= 7 \\ -x(-1) &= 7(-1) \\ x &= (-7) \end{aligned}$$

d) Alternate Method

$$\begin{aligned} (-4) - x &= 0 \\ (-4) - x + 4 &= 0 + 4 \\ -x &= 4 \\ -x(-1) &= 4(-1) \\ x &= (-4) \end{aligned}$$