Solve the equation.

a. \[ 4(x - 5) = 4x - 20 \]

b. \[ 3x - 9 = 3x + 10 \]

**SOLUTION**

a. \[ 4(x - 5) = 4x - 20 \] Write original equation.

\[ 4x - 20 = 4x - 20 \] Use distributive property.

\[ -20 = -20 \] Subtract 4x from each side.

 עבוד All values of \( x \) are solutions, because \(-20 = -20\) is always true. The original equation is an identity.

b. \[ 3x - 9 = 3x + 10 \] Write original equation.

\[ -9 \neq 10 \] Subtract 3x from each side.

 Gow The original equation has no solution, because \(-9 \neq 10\) for any value of \( x \).