

Exercise 35

Given the function $f(x) = 8 - 3x$:

- (a) Evaluate $f(-2)$.
 - (b) Solve $f(x) = -1$.
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Solution

Evaluate the given function at $x = -2$.

$$f(-2) = 8 - 3(-2) = 8 + 6 = 14 \quad \rightarrow \quad \boxed{f(-2) = 14}$$

Plug in -1 for $f(x)$ and solve the equation for x .

$$-1 = 8 - 3x$$

$$-1 - 8 = -3x$$

$$-9 = -3x$$

$$\frac{-9}{-3} = x$$

$$\boxed{x = 3}$$