

Show what calculation you make to solve each problem.

- 1 Is $x = 2$ a solution to $3x - 1 = 5$?

When $x = 2$, the left-hand side becomes

$$3x - 1 = 3(2) - 1 = 5,$$

while the right-hand side of course is

$$5.$$

Since these are the same, this **is a solution**.

- 2 Is $k = 3/4$ a solution to $8k - 2 = 4$?

When $k = 3/4$, the left-hand side becomes

$$8k - 2 = 8\left(\frac{3}{4}\right) - 2 = 4,$$

while the right-hand side of course is

$$4.$$

Since these are the same, this **is a solution**.

- 3 **Extra credit:** Is $(x = 2, y = -1)$ a solution to $y = -3x + 5$?

When $x = 2$ and $y = -1$, the left-hand side becomes

$$y = -1,$$

while the right-hand side becomes

$$-3x + 5 = -3(2) + 5 = -1.$$

Since these are the same, this **is a solution**.