

Topic: Determine if a number is a solution to an equation.

Indicate whether the given value is a solution to the corresponding equation.

Show your work.

1. $a = -3$; $4a + 3 = -9$ 2. $x = \frac{4}{3}$; $\frac{3}{4}x + \frac{1}{2} = \frac{3}{2}$ Yes?/No?
Yes?/No?

3. $y = 2$; $2.5y - 10 = -0.5$ 4. $z = -5$; $2(5 - 2z) = 20 - 2(z - 1)$
Yes?/No? Yes?/No?

Solve the following equations. Justify each step of your work.

5. $-8(-8x - 6) = -6x - 22$ 6. $8 + 40x + 5 = 13 + 5x$

7. $-5(4a - 2) = -2(3 + 6a)$

8. $10r + 6 = -4(-5 - 2r) + 3r$