

Two-step equations

Solve for the letter in each equation. Show your working, and write the answer on the line.

Name _____ Date _____

1. $m + 8 = 28$

m = _____

2. $4a + 4 = 12$

a = _____

3. $4n = 8$

n = _____

4. $\frac{x}{5} + 1 = 10$

x = _____

5. $20 = m - 1$

m = _____

6. $4a - 6 = 38$

a = _____

7. $\frac{p}{8} = 4$

p = _____

8. $42 = 2 + 4p$

p = _____

9. $p + 16 = 32$

p = _____

10. $1 + 5k = 16$

k = _____

11. $9a = 27$

a = _____

12. $\frac{m}{6} + 3 = 12$

m = _____

Two-step equations: answer key

Each equation worked one step a line. What was done to both sides is beside each step.

1. $m + 8 = 28$

$m = 20$ Subtract 8 from both sides.

Check: $20 + 8 = 28$

2. $4a + 4 = 12$

$4a = 8$ Subtract 4 from both sides.

$a = 2$ Divide both sides by 4.

Check: $4(2) + 4 = 12$

3. $4n = 8$

$n = 2$ Divide both sides by 4.

Check: $4(2) = 8$

4. $\frac{x}{5} + 1 = 10$

$\frac{x}{5} = 9$ Subtract 1 from both sides.

$x = 45$ Multiply both sides by 5.

Check: $\frac{45}{5} + 1 = 10$

5. $20 = m - 1$

$21 = m$ Add 1 to both sides.

$m = 21$

Check: $20 = 21 - 1$

6. $4a - 6 = 38$

$4a = 44$ Add 6 to both sides.

$a = 11$ Divide both sides by 4.

Check: $4(11) - 6 = 38$

7. $\frac{p}{8} = 4$

$p = 32$ Multiply both sides by 8.

Check: $\frac{32}{8} = 4$

8. $42 = 2 + 4p$

$40 = 4p$ Subtract 2 from both sides.

$10 = p$ Divide both sides by 4.

$p = 10$

Check: $42 = 2 + 4(10)$

9. $p + 16 = 32$

$p = 16$ Subtract 16 from both sides.

Check: $16 + 16 = 32$

10. $1 + 5k = 16$

$5k = 15$ Subtract 1 from both sides.

$k = 3$ Divide both sides by 5.

Check: $1 + 5(3) = 16$

11. $9a = 27$

$a = 3$ Divide both sides by 9.

Check: $9(3) = 27$

12. $\frac{m}{6} + 3 = 12$

$\frac{m}{6} = 9$ Subtract 3 from both sides.

$m = 54$ Multiply both sides by 6.

Check: $\frac{54}{6} + 3 = 12$