

Two-step equations

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

Name _____ Date _____

1. $8(x + 1) = 72$

x = _____

2. $98 = 7(x + 6)$

x = _____

3. $5(x + 2) = 50$

x = _____

4. $3(x + 1) = 36$

x = _____

5. $5(x + 7) = 95$

x = _____

6. $60 = 4(x + 6)$

x = _____

7. $3(x + 12) = 57$

x = _____

8. $2(x + 2) = 26$

x = _____

9. $8(x + 5) = 72$

x = _____

10. $48 = 8(x + 3)$

x = _____

11. $4(x + 9) = 60$

x = _____

12. $5(x + 4) = 75$

x = _____

Two-step equations: answer key

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

1. **$8(x + 1) = 72$**

$x + 1 = 9$ Divide both sides by 8.

$x = 8$ Subtract 1 from both sides.

Check: $8(8 + 1) = 72$

2. **$98 = 7(x + 6)$**

$14 = x + 6$ Divide both sides by 7.

$8 = x$ Subtract 6 from both sides.

$x = 8$

Check: $98 = 7(8 + 6)$

3. **$5(x + 2) = 50$**

$x + 2 = 10$ Divide both sides by 5.

$x = 8$ Subtract 2 from both sides.

Check: $5(8 + 2) = 50$

4. **$3(x + 1) = 36$**

$x + 1 = 12$ Divide both sides by 3.

$x = 11$ Subtract 1 from both sides.

Check: $3(11 + 1) = 36$

5. **$5(x + 7) = 95$**

$x + 7 = 19$ Divide both sides by 5.

$x = 12$ Subtract 7 from both sides.

Check: $5(12 + 7) = 95$

6. **$60 = 4(x + 6)$**

$15 = x + 6$ Divide both sides by 4.

$9 = x$ Subtract 6 from both sides.

$x = 9$

Check: $60 = 4(9 + 6)$

7. **$3(x + 12) = 57$**

$x + 12 = 19$ Divide both sides by 3.

$x = 7$ Subtract 12 from both sides.

Check: $3(7 + 12) = 57$

8. **$2(x + 2) = 26$**

$x + 2 = 13$ Divide both sides by 2.

$x = 11$ Subtract 2 from both sides.

Check: $2(11 + 2) = 26$

9. **$8(x + 5) = 72$**

$x + 5 = 9$ Divide both sides by 8.

$x = 4$ Subtract 5 from both sides.

Check: $8(4 + 5) = 72$

10. **$48 = 8(x + 3)$**

$6 = x + 3$ Divide both sides by 8.

$3 = x$ Subtract 3 from both sides.

$x = 3$

Check: $48 = 8(3 + 3)$

11. **$4(x + 9) = 60$**

$x + 9 = 15$ Divide both sides by 4.

$x = 6$ Subtract 9 from both sides.

Check: $4(6 + 9) = 60$

12. **$5(x + 4) = 75$**

$x + 4 = 15$ Divide both sides by 5.

$x = 11$ Subtract 4 from both sides.

Check: $5(11 + 4) = 75$