Solving equations

Name: _____ Date: _____



Mr Boston says: Write each step on a new line with the equals signs lined up.

A. Two-step equations

Solve each equation. Show each step.

1 Solve 3x + 10 = 16.

Answer: _____

2 Solve 3x + 5 = 17.

Answer: _____

3 Solve 2x + 3 = 25.

Answer: _____

4 Solve 7x − 2 = 68.

Answer: _____

5 Solve 4x − 2 = −6.

Answer: _____

6 Solve x/5 + 3 = 7.

Answer: _____

B. Harder equations

7 Solve 6x + 12 = 2x + 36.

Answer: _____

8 Solve 5x + 1 = 2x + 25.

Answer: _____

9 Solve 5x + 10 = 4x + 14.

Answer: _____

10 Solve 3(x + 2) = 27.

Answer: _____

11 Solve 4(2x − 1) = 36.

Answer: _____

12 Solve 2x + 7 = 4.

Answer: _____

C. Forming equations

13 I think of a number, multiply it by 4 and add 9. The answer is 45. What is my number?

Answer: _____

14 The perimeter of a rectangle with sides x and x + 5 is 38 cm. Find x.

Answer: _____

Answers for grown-ups

Solving equations

1. Solve 3x + 10 = 16. → **x = 2**
2. Solve 3x + 5 = 17. → **x = 4**
3. Solve 2x + 3 = 25. → **x = 11**
4. Solve 7x − 2 = 68. → **x = 10**
5. Solve 4x − 2 = −6. → **x = −1**
6. Solve x/5 + 3 = 7. → **x = 20**
7. Solve 6x + 12 = 2x + 36. → **x = 6**
8. Solve 5x + 1 = 2x + 25. → **x = 8**
9. Solve 5x + 10 = 4x + 14. → **x = 4**
10. Solve 3(x + 2) = 27. → **x = 7**
11. Solve 4(2x − 1) = 36. → **x = 5**
12. Solve 2x + 7 = 4. → **x = −3/2 (or −1.5)**
13. I think of a number, multiply it by 4 and add 9. The answer is 45. What is my number? → **9**
14. The perimeter of a rectangle with sides x and x + 5 is 38 cm. Find x. → **x = 7**