

Solve an equation needing expansion first

NAME	DATE	SCORE / 10
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1 Solve for x : $-6(x - 4) = 18$

2 A rectangle is 7 cm wide and $(x + 2)$ cm long, and its area is 56 square cm. The equation $7(x + 2) = 56$ shows this. What is the value of x ?

3 Maya solved $2(x - 4) = 6$ in the steps below. Which step is the first one that is wrong?

Step 1: $2x - 8 = 6$

Step 2: $2x = 14$

Step 3: $x = 12$

☐ Step 1 ☐ Step 2 ☐ Step 3

4 Solve for x : $6(x + 4) = -12$

5 6 friends each buy a ticket and a \$4 drink. They pay \$120 in all. The equation $6(t + 4) = 120$ shows this, where t is the price of one ticket, in dollars. What is the price of one ticket, in dollars?

6 Leo solved $2(x - 2) = 6$ in the steps below. Which step is the first one that is wrong?

Step 1: $2x - 4 = 6$

Step 2: $2x = 10$

Step 3: $x = 8$

☐ Step 1 ☐ Step 2 ☐ Step 3

7Solve for x : $4(3x - 9) = 0$ **8**

Ana buys 2 shirts that each cost x dollars, with \$4 off each shirt, and pays \$48 in all. The equation $2(x - 4) = 48$ shows this. What is the price of one shirt before the money off, in dollars?

9Solve for x : $-6(x + 8) = -72$ **10**Solve for x : $2(x - 6) = 2$

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1 1

3 Step 3

5 16

7 3

9 4

2 6

4 -6

6 Step 3

8 28

10 7