

Solve an equation needing expansion first

NAME	DATE	SCORE / 10
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1 Solve for x : $-2(x - 6) = 20$

2 3 friends each buy a ticket and a \$5 drink. They pay \$63 in all. The equation $3(t + 5) = 63$ shows this, where t is the price of one ticket, in dollars. What is the price of one ticket, in dollars?

3 Noah solved $5(x - 5) = 15$ in the steps below. Which step is the first one that is wrong?

Step 1: $5x - 25 = 15$

Step 2: $5x = 40$

Step 3: $x = 35$

☐ Step 1 ☐ Step 2 ☐ Step 3

4 Solve for x : $6(x - 5) - 8 = -20$

5 A rectangle is 8 cm wide and $(x + 5)$ cm long, and its area is 96 square cm. The equation $8(x + 5) = 96$ shows this. What is the value of x ?

6 Leo solved $2(x - 4) = 8$ in the steps below. Which step is the first one that is wrong?

Step 1: $2x - 8 = 8$

Step 2: $2x = 16$

Step 3: $x = 14$

☐ Step 1 ☐ Step 2 ☐ Step 3

7 Solve for x : $-6(x + 5) - 8 = -26$

9 Solve for x : $6(x + 7) = 36$

8 Leo buys 5 shirts that each cost x dollars, with \$5 off each shirt, and pays \$120 in all. The equation $5(x - 5) = 120$ shows this. What is the price of one shirt before the money off, in dollars?

10 Solve for x : $5(x - 3) = -25$

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1 -4

3 Step 3

5 7

7 -2

9 -1

2 16

4 3

6 Step 3

8 29

10 -2