

Solve an equation needing like terms combined first

NAME	DATE	SCORE / 10
------	------	------------

1 Solve for x : $6x + 2x + 8 = 16$

2 Maya runs x km on Monday, 5 times as far on Tuesday, and 9 km less than on Monday on Wednesday. Maya runs 89 km in all. The equation $x + 5x + x - 9 = 89$ shows this. How many kilometres does Maya run on Monday?

3 Cleo solved $2x + 5x - 4 = 45$ in the steps below. Which step is the first one that is wrong?

Step 1: $7x - 4 = 45$

Step 2: $7x = 49$

Step 3: $x = 42$

☐ Step 1 ☐ Step 2 ☐ Step 3

4 Solve for x : $7x - 1 - 5x = -15$

5 Emma buys 2 pens and 3 notebooks, which all cost x dollars each. Emma uses a \$3 coupon and pays \$32. The equation $2x + 3x - 3 = 32$ shows this. How much does one pen cost, in dollars?

6 Leo solved $2x + 4x - 3 = 21$ in the steps below. Which step is the first one that is wrong?

Step 1: $6x - 3 = 21$

Step 2: $6x = 18$

Step 3: $x = 3$

☐ Step 1 ☐ Step 2 ☐ Step 3

7 Solve for x : $5x + 12 + 6x - 9 = -85$

8 The sides of a triangle are x cm, $3x$ cm and $(x + 12)$ cm long, and its perimeter is 42 cm. The equation $x + 3x + x + 12 = 42$ shows this. What is the value of x ?

9 Solve for x : $5x - 7x + 8 = 6$

10 Solve for x : $5x - 3 + 2x + 2 = 55$

Solve an equation needing like terms combined first

1 1

3 Step 3

5 7

7 -8

9 1

2 14

4 -7

6 Step 2

8 6

10 8