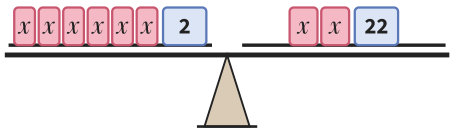
Equations with the unknown on both sides

1

Solve

$6x + 2 = 2x + 22$



– 2x both sides

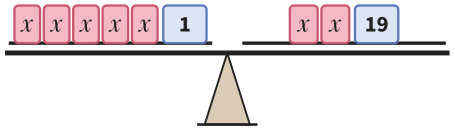
$4x + 2 = 22$

Answer _____

2

Solve

$5x + 1 = 2x + 19$



Answer _____

3

Solve

$6x - 3 = 2x + 9$

Answer _____

4

Solve

$2x + 25 = 7x + 5$

Answer _____

5

Solve

$5x + 18 = 2x + 3$

Answer _____

6

Priya solves $5x + 4 = 3x + 20$.

Her first line is $8x + 4 = 20$.

What has she done wrong?

Find the right answer.

Answer _____

7

Solve

$4(x + 1) = 2(x + 8)$

Answer _____

8

A sunflower is $(3x + 10)$ cm tall.

A tomato plant is $(5x + 2)$ cm tall.

They are the same height. Find x, then their height.

Answer _____

Equations with the unknown on both sides *further practice*

9

Solve

$8x - 5 = 3x + 20$

Answer _____

10

Solve

$x + 17 = 4x - 1$

Answer _____

11

Solve

$3x - 8 = 7x + 12$

Answer _____

12

Solve

$5(x - 2) = 3x + 4$

Answer _____

13

Solve

$2(3x - 4) = 2(x + 6)$

Answer _____

14

Zak says $x = 3$ is the solution of $4x + 7 = 2x + 15$. Check his answer in both sides. Is he right? If not, find the right answer.

Answer _____

15

The same number goes into two machines. Machine A multiplies by 6, then subtracts 4. Machine B multiplies by 2, then adds 24. Both machines give the same answer. What number went in?

Answer _____

16

Kai solves $9x + 2 = 5x - 10$.

His working is $4x + 2 = -10$, $4x = -8$, $x = -2$. Find his mistake.

Write the right answer.

Answer _____