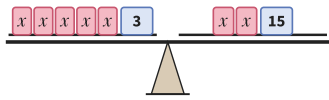


Equations: the Unknown on Both Sides

1

Solve

$$5x + 3 = 2x + 15$$



$- 2x$ both sides

$$3x + 3 = 15$$

$- 3$ both sides

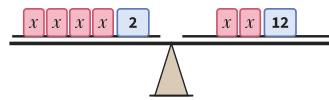
$$3x = 12$$

Answer _____

2

Solve

$$4x + 2 = 2x + 12$$



$- 2x$ both sides

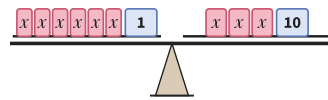
$$2x + 2 = 12$$

Answer _____

3

Solve

$$6x + 1 = 3x + 10$$



$- 3x$ both sides

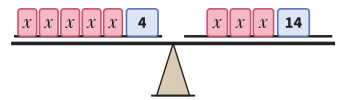
$$3x + 1 = 10$$

Answer _____

4

Solve

$$5x + 4 = 3x + 14$$



$- 3x$ both sides

$$2x + 4 = 14$$

Answer _____

5

Solve

$$7x + 2 = 4x + 20$$

Answer _____

6

Solve

$$3x + 5 = x + 11$$

Answer _____

7

The expressions $3x + 4$ and $x + 12$ are equal. Find x .

Answer _____

8

A square has sides of $(2x + 1)$ cm and $(x + 6)$ cm. Find the length of one side.

Answer _____

Equations: the Unknown on Both Sides *further practice*

9

Solve

$$7x + 2 = 3x + 26$$

Answer _____

10

Solve

$$5x - 4 = 2x + 11$$

Answer _____

11

Solve

$$3x + 20 = 7x + 4$$

Answer _____

12

Solve

$$4x + 9 = x + 3$$

Answer _____

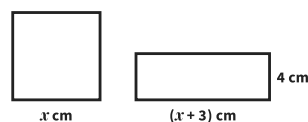
13

Ella has 3 full bags of sweets and 8 loose sweets. Finn has 1 full bag and 20 loose sweets. Every bag holds the same number of sweets. Ella and Finn have the same number of sweets. How many sweets are in a bag?

Answer _____

14

The square and the rectangle have the same perimeter. Find x .



Answer _____

15

Tank A holds 90 litres of water and drains at 4 litres a minute. Tank B holds 60 litres and drains at 1 litre a minute. After how many minutes do they hold the same amount?

Answer _____

16

Tom solves $6x + 5 = 2x + 17$. His first line is $8x + 5 = 17$. What has Tom done wrong? Find the right answer.

Answer _____