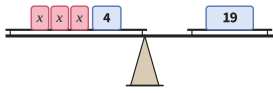


Solving Equations

ANSWERS

1

Solve $3x + 4 = 19$



- 4 both sides

$$3x = 15$$

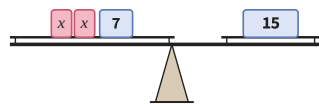
÷ 3 both sides

$$x = 5$$

Answer $x = 5$

2

Solve $2x + 7 = 15$



- 7 both sides

$$2x = 8$$

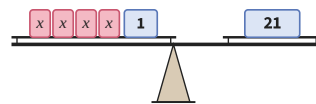
÷ 2 both sides

$$x = 4$$

Answer $x = 4$

3

Solve $4x + 1 = 21$



- 1 both sides

$$4x = 20$$

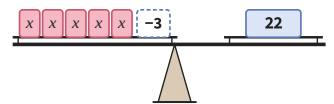
÷ 4 both sides

$$x = 5$$

Answer $x = 5$

4

Solve $5x - 3 = 22$



+ 3 both sides

$$5x = 25$$

÷ 5 both sides

$$x = 5$$

Answer $x = 5$

5

Solve $3x - 8 = 13$

+ 8 both sides

$$3x = 21$$

÷ 3 both sides

$$x = 7$$

Answer $x = 7$

6

Solve $6x + 5 = 41$

- 5 both sides

$$6x = 36$$

÷ 6 both sides

$$x = 6$$

Answer $x = 6$

7

I think of a number, multiply it by 4 and add 7. The answer is 35. What was my number?

$$4x + 7 = 35$$

Answer $x = 7$

8

A rectangle has sides of $(x + 3)$ cm and 4 cm. Its perimeter is 26 cm. Find x .

$$2(x + 3) + 8 = 26$$

Answer $x = 6$

Solving Equations further practice

ANSWERS

9

Solve $7x - 4 = 31$

$$7x = 35$$

Answer $x = 5$

10

Solve $38 = 5x + 3$

$$35 = 5x$$

Answer $x = 7$

11

Solve $2x + 5 = 12$

$$2x = 7$$

Answer $x = 3.5$

12

Solve $3x + 10 = 4$

$$3x = -6$$

Answer $x = -2$

13

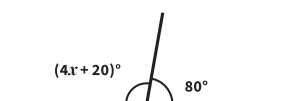
A plumber charges a £30 call out fee plus £25 for each hour of work. A bill comes to £130. How many hours did the plumber work?

$$25h + 30 = 130$$

Answer 4 hours

14

The diagram shows two angles on a straight line. Find x .



$$4x + 20 + 80 = 180$$

$$4x = 80$$

Answer $x = 20$

15

Four friends share the cost of a meal equally. Each friend also pays £3 for a drink. Each friend pays £11 altogether. How much did the meal cost?

$$\frac{m}{4} + 3 = 11$$

$$\frac{m}{4} = 8$$

Answer $£32$

16

Lucy solves $4x + 8 = 36$. She writes $x + 8 = 9$, so $x = 1$. What has Lucy done wrong? Find the right answer.

she divided $4x$ by 4 but not the 8

$$4x = 28$$

Answer $x = 7$