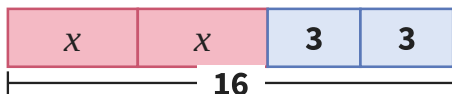


Equations with Brackets

ANSWERS

1

Solve $2(x + 3) = 16$



Expand

$$2x + 6 = 16$$

$- 6$ both sides

$$2x = 10$$

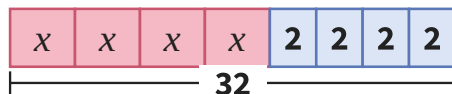
$\div 2$ both sides

$$x = 5$$

Answer $x = 5$

2

Solve $4(x + 2) = 32$



Expand

$$4x + 8 = 32$$

$- 8$ both sides

$$4x = 24$$

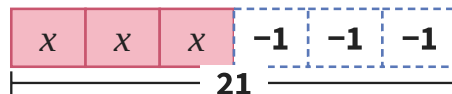
$\div 4$ both sides

$$x = 6$$

Answer $x = 6$

3

Solve $3(x - 1) = 21$



Expand

$$3x - 3 = 21$$

$+ 3$ both sides

$$3x = 24$$

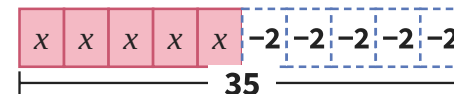
$\div 3$ both sides

$$x = 8$$

Answer $x = 8$

4

Solve $5(x - 2) = 35$



Expand

$$5x - 10 = 35$$

$+ 10$ both sides

$$5x = 45$$

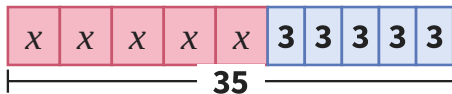
$\div 5$ both sides

$$x = 9$$

Answer $x = 9$

5

Solve $5(x + 3) = 35$



Expand

$$5x + 15 = 35$$

$- 15$ both sides

$$5x = 20$$

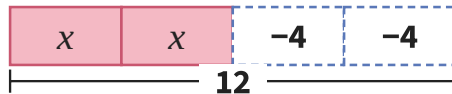
$\div 5$ both sides

$$x = 4$$

Answer $x = 4$

6

Solve $2(x - 4) = 12$



Expand

$$2x - 8 = 12$$

$+ 8$ both sides

$$2x = 20$$

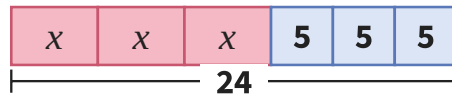
$\div 2$ both sides

$$x = 10$$

Answer $x = 10$

7

Write the equation for these bars. Then solve it.



Equation $3(x + 5) = 24$

Expand

$$3x + 15 = 24$$

$- 15$ both sides

$$3x = 9$$

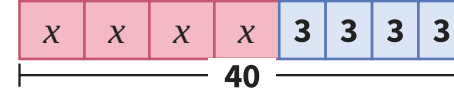
$\div 3$ both sides

$$x = 3$$

Answer $x = 3$

8

4 friends each buy a £x ticket and a £3 drink. They spend £40. Find x.



Equation $4(x + 3) = 40$

Expand

$$4x + 12 = 40$$

$- 12$ both sides

$$4x = 28$$

$\div 4$ both sides

$$x = 7$$

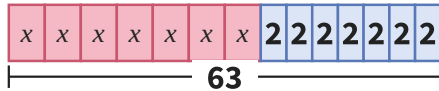
Answer $x = 7$

Equations with Brackets *further practice*

ANSWERS

9

Solve $7(x + 2) = 63$



Expand

$$7x + 14 = 63$$

$- 14$ both sides

$$7x = 49$$

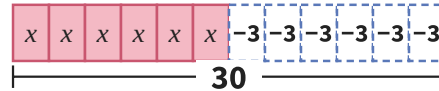
$\div 7$ both sides

$$x = 7$$

Answer $x = 7$

10

Solve $6(x - 3) = 30$



Expand

$$6x - 18 = 30$$

$+ 18$ both sides

$$6x = 48$$

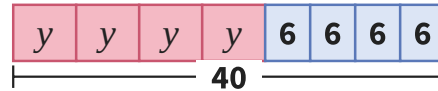
$\div 6$ both sides

$$x = 8$$

Answer $x = 8$

11

Solve $4(y + 6) = 40$



Expand

$$4y + 24 = 40$$

$- 24$ both sides

$$4y = 16$$

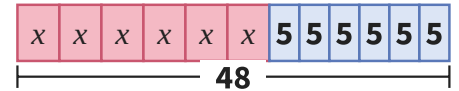
$\div 4$ both sides

$$y = 4$$

Answer $y = 4$

12

Solve $48 = 6(x + 5)$



Expand

$$48 = 6x + 30$$

$- 30$ both sides

$$18 = 6x$$

$\div 6$ both sides

$$3 = x$$

Answer $x = 3$

13

I think of a number, n . I add 5. Then I multiply by 2. I get 30. What is my number?



Equation $2(n + 5) = 30$

Expand

$$2n + 10 = 30$$

$- 10$ both sides

$$2n = 20$$

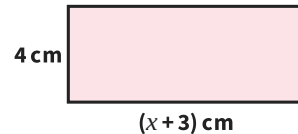
$\div 2$ both sides

$$n = 10$$

My number 10

14

The area of this rectangle is 32 cm^2 . Find x .



Equation $4(x + 3) = 32$

Expand

$$4x + 12 = 32$$

$- 12$ both sides

$$4x = 20$$

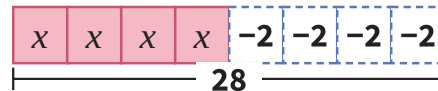
$\div 4$ both sides

$$x = 5$$

Answer $x = 5$

15

4 boxes each hold x eggs. 2 eggs in each box are broken. 28 eggs are not broken. Find x .



Equation $4(x - 2) = 28$

Expand

$$4x - 8 = 28$$

$+ 8$ both sides

$$4x = 36$$

$\div 4$ both sides

$$x = 9$$

Answer $x = 9$

16

Sam has made a mistake. What is it?

Sam solves $2(x + 4) = 20$

Expand

$$2x + 4 = 20$$

$- 4$ both sides

$$2x = 16$$

$\div 2$ both sides

$$x = 8$$

Sam forgot to multiply the 4 by 2

$$2x + 8 = 20$$

The answer is $x = 6$