

Y6 Algebra

KS2 Y6 Maths · Follows the national curriculum

Name _____ Class _____ Date _____

1. Worked example

$\square + 7 = 12$. Write this with a letter and solve it.

Step 1 · Use a letter for the missing number

$$x + 7 = 12$$

Step 2 · Subtract 7 from both sides

$$x = 5$$

Answer: $x = 5$

Check: $5 + 7 = 12$ ✓

2. Now try one with the steps

Solve $3x + 4 = 19$.

Step 1 · Subtract 4 from both sides

Step 2 · Divide both sides by 3

Answer:

3. Practice

Have a go at each one. There is space underneath to work it out.

1. Solve $x + 7 = 12$. What is x ?

2. Solve $2x = 18$. What is x ?

3. Solve $y - 9 = 15$. What is y ?

4. Solve $a \div 4 = 6$. What is a ?

5. Solve $5x - 3 = 22$. What is x ?

6. Solve $4n + 6 = 30$. What is n ?

7. Solve $3m - 8 = 13$. What is m ?

8. A number multiplied by 6 is 54. Write an equation and find the number.

9. I think of a number, multiply it by 3 and subtract 4. The answer is 20. What is my number?

10. The angles of a triangle are x , 50° and 70° . Find x .

11. A rectangle has sides x cm and 5 cm. Its perimeter is 26 cm. Find x .

12. A pen costs p pence. 4 pens and a 60p ruler cost £2.20 altogether. How many pence is p ?

13. Solve $2(x + 3) = 20$. What is x ?

14. Solve $7 + 3k = 31$. What is k ?

15. Ruby is y years old. Her dad is 4 times and is 36. Write an equation and find y .

4. Before you hand it in

Solving $3x + 4 = 19$ by dividing first: $x + 4 = 6.33$.

Undo in reverse order: the $+ 4$ was done last, so subtract 4 first ($3x = 15$), then divide by 3 ($x = 5$).

Subtracting 4 from one side only: $3x = 19$.

Do the same to both sides: $3x + 4 - 4 = 19 - 4$, so $3x = 15$.

Writing 'double a number add 5' + 5 or $2 + n + 5$.

$2 \times n$ is written $2n$. So the expression is $2n + 5$.