Equations and Inequalities

Solving equations and inequalities is a core algebra skill that underpins problem-solving across the whole of KS3 and GCSE maths!

$3y + 1 = 16$

$y =$ ..... 1 mark

$18 = 4k + 6$

$k =$ ..... 1 mark

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22. Work out

374×23

..... 2 marks

KS3 Maths SATs, Tier 3-5, Paper 1 (2005) - Q22

. How many eighths are there in one quarter?

.....

Now work out $\frac{3}{4} \div \frac{1}{8}$

.....

3 marks

. Solve this equation.

$75 + 2t = 100 - 2t$

$t =$ .....

2 marks

Modern Tuition

Find the value of x

$6 + 2x = x - 6$



$x =$ _____

2 marks

Work out



$$\frac{1 \times 2 \times 3 \times 4 \times 5}{1 \times 2 \times 3} =$$ _____

1 mark

Modern Tuition

(a) Look at the equation.

$$5x + 1 = 2x - 8$$

Complete the sentence below by ticking (✓) the correct box.

The value of x is ...

- ☐ ... one particular number.
- ☐ ... any number less than zero.
- ☐ ... any number greater than zero.
- ☐ ... any whole number.
- ☐ ... any number at all.

1 mark

(b) Now look at this equation.

$$y = 3x - 2$$

Complete the sentence below by ticking (✓) the correct box.

The value of x is ...

- ☐ ... one particular number.
- ☐ ... any number less than zero.
- ☐ ... any number greater than zero.
- ☐ ... any whole number.
- ☐ ... any number at all.

1 mark

Modern Tuition

Solve these simultaneous equations using an algebraic method.

$$3x + 6y = 30$$

$$x + 6y = 20$$

You **must** show your working.



$x =$ _____ $y =$ _____ 3 marks

Modern Tuition