

Lesson 5

GCSE Mathematics Algebra, Rearranging Formulae

5.1 $-x$



Example

We begin by looking at a couple of ways of answering the following question.

Question: Make x the subject of $a - 4mx - 5 = 8k$

Method 1 solution: $a - 4mx - 5 = 8k$

Method 2 solution: $a - 4mx - 5 = 8k$

Exercise 5.2

Question 1

Showing full working, by first multiplying both sides by -1 , make x the subject

$$-3x + y^3 = 17d$$

Question 2

Showing full working, by first multiplying both sides by 5 , make x the subject

$$\frac{8w - x}{5} = h$$

Question 3

Showing full working, by first swapping the LHS and RHS, make x the subject

$$1 + w = 4x - z^2$$

Question 4

Showing full working, by first multiplying both sides by -1 , make x the subject

$$p - \frac{3}{x} = E z$$

Question 5

Showing full working, by first taking the reciprocal of both sides, make x the subject

$$\frac{1}{4m - x} = \frac{k + 4}{12}$$

Question 6

Showing full working, by first swapping the LHS and RHS, make x the subject

$$w = \frac{4 + z}{x} + v^2$$

Question 7

Showing full working, by first expanding the brackets, make x the subject

$$5\left(1 - \frac{3z}{x}\right) = -k$$

Question 8

Showing full working, by first swapping the LHS and RHS, make x the subject

$$7k + 2w = \frac{x}{3}$$

Write your answer without brackets.

Question 9

Showing full working, by first subtracting $7w$ from both sides, make x the subject

$$\frac{px}{5} + 7w = 2v$$

Write your answer without brackets.

Question 10

Showing full working, by first multiplying both sides by -1 , make x the subject

$$-x + \frac{m^2}{7b + w} = \sqrt{p}$$