Lesson 7

GCSE Mathematics
Algebra, Rearranging Formulae

7.1 Making letters, other than *x*, the subject

Example 1
Showing full working, make *k* the subject

$$\frac{3m + 10p - 8a^2}{k} = \frac{1}{6}$$

Example 2
Showing full working, make *m* the subject

$$\sqrt{\frac{4 + h}{m}} = \frac{p}{5}$$

7.2 Exercise

Question 1

Showing full working, make a the subject

$$\sqrt{\frac{a}{3}} = 5w$$

Question 2

Showing full working, make u the subject

$$\frac{3}{v + 4u} = \frac{1}{5e^2 + 7s}$$

Question 3

Showing full working, make w the subject

$$\frac{2.4}{s} = w^2 - m$$

Question 4

Showing full working, make m the subject

$$y = mx + c$$

Question 5

Showing full working, make c the subject

$$\sqrt{c^2 - 5k} = 3p$$

Question 6

Showing full working, make b the subject

$$\frac{b}{8} - 4h = 2t + 5$$

Write your answer without any brackets.

Question 7

Showing full working, make f the subject

$$\sqrt{3g + f} = \frac{3v}{w}$$

Question 8

Showing full working, by first multiplying both sides by 3, make z the subject

$$\frac{1}{3z^2} = 2r + y$$

Write your answer without any brackets

Question 9

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

$$h = 3\left(\frac{4}{w} + 5\right)$$

Question 10

Showing full working, make p the subject

$$\frac{1}{5p^2} = \frac{3a + 2b}{16c^2}$$