

## Change the subject

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### Question 1

Make  $f$  the subject of

$$m = \sqrt{\frac{1}{3}ef}$$

$$f = \dots\dots\dots$$

**(2 marks)**

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### Question 2

Rearrange

$$a(q - c) = d$$

to make  $q$  the subject.

$$q = \dots\dots\dots$$

### Question 3

Make  $q$  the subject of the formula  $5(q + p) = 4 + 8p$

Give your answer in its simplest form.

$$q = \dots\dots\dots$$

**(3 marks)**

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### Question 4

Make  $s$  the subject of  $v^2 = u^2 + 2as$

$$s = \dots\dots\dots$$

**(2 marks)**

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### Question 5

Make  $b$  the subject of

$$P = \frac{1}{2}ab^2$$

$$b = \pm \dots\dots\dots$$

**(2 marks)**

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### Question 6

Make  $a$  the subject of the formula  $M = ac - bd$

$$a = \dots\dots\dots$$

**(2 marks)**

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### Question 7

Rearrange the formula  $y = a^2 - bx^2$  to make  $x$  the subject.

$$x = \pm \dots\dots\dots$$

**(3 marks)**

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### Question 8

Rearrange the formula  $I = kT^4$  to make  $T$  the subject.

$$T = \dots\dots\dots$$

**(2 marks)**

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### Question 9

When you are  $h$  feet above sea level, you can see  $d$  miles to the horizon, where

$$d = \sqrt{\frac{3h}{2}}$$

Make  $h$  the subject of the formula.

$$h = \dots\dots\dots$$

### Question 10

Rearrange

$$\frac{1}{u} + \frac{1}{v} = \frac{1}{f}$$

to make  $u$  the subject of the formula.

Give your answer in its simplest form.

$$u = \dots\dots\dots$$

**(2 marks)**

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### Question 11

Make  $y$  the subject of the formula

$$V = \frac{2}{3}hy^2$$

$$y = \pm \dots\dots\dots$$

**(2 marks)**

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### Question 12

Make  $t$  the subject of

$$p = \sqrt{a + \frac{t}{2}}$$

$$t = \dots\dots\dots$$

**(3 marks)**

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