Chhetri Academy

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GCSE MATHS

Algebra

Edexcel 1MA1 | Subtopic collection Topic 16

Changing the subject

Foundation tier

Past paper question booklet

15	2012-2025	Foundation
question groups	available papers	tier

Before you begin

1. Show working and use units where appropriate.
2. Use extra paper if you need more space.
3. Print at actual size (100%) for measurement questions.

Name _____ **Date** _____

Whole questions are retained for context; some parts cover other points. Legacy sources are labelled.

25 (a) Expand $3(2y - 5)$

.....
(1)

(b) Factorise completely $8x^2 + 4xy$

.....
(2)

(c) Make h the subject of the formula

$$t = \frac{gh}{10}$$

$h =$ .....
(2)

(Total for Question 25 is 5 marks)

25 Make h the subject of the formula $x = 5h + 8$

.....

(Total for Question 25 is 2 marks)

24 (a) Factorise $3e^2 + 5e$

.....

(1)

(b) Solve $7(k - 3) = 3k - 5$

$k =$ .....

(3)

(c) Make a the subject of the formula $f = \frac{a + 1}{2}$

.....

(2)

(Total for Question 24 is 6 marks)

17 Make h the subject of the formula $G = 3h - 5$

.....

(Total for Question 17 is 2 marks)

11 $T = 4v + 3$

(a) Work out the value of T when $v = 2$

$T =$ .....

(2)

(b) Make v the subject of the formula $T = 4v + 3$

.....

(2)

(Total for Question 11 is 4 marks)

Question 06

28 Make g the subject of the formula $T = \sqrt{\frac{g + 6}{2}}$

.....

(Total for Question 28 is 3 marks)

21 $v^2 = u^2 + 2as$

$u = 12 \quad a = -3 \quad s = 18$

(a) Work out a value of v.

.....

(2)

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

.....

(2)

(Total for Question 21 is 4 marks)

Question 08

June 2019 | 1MA1/3F | Original Q19

19 Make x the subject of the formula $y = 2x + 4$

.....

(Total for Question 19 is 2 marks)

30 (a) Make q the subject of $p = 6q + 7$

.....

(2)

(b) Simplify $(m^{-2})^{-3}$

.....

(1)

(Total for Question 30 is 3 marks)

23 $T = 4m^2 - 11$

(a) Work out the value of T when $m = -3$

$T =$ .....

(2)

(b) Make p the subject of the formula $d = 3p + 4$

.....

(2)

(Total for Question 23 is 4 marks)

21 Make a the subject of the formula $p = 3a - 9$

.....

(Total for Question 21 is 2 marks)

22 (a) Expand and simplify $3(2y - 5) + 7(y + 2)$

.....

(2)

(b) Factorise fully $6x^2 + 15x$

.....

(2)

(c) Make g the subject of the formula $f = 3g + 11$

.....

(2)

(Total for Question 22 is 6 marks)

29 $w = 40 - t^2$

(a) Calculate the value of w when $t = -5$

$w =$ .....

(2)

$$p = \frac{h - 5}{3}$$

(b) Make h the subject of the formula.

.....

(2)

(Total for Question 29 is 4 marks)

25 Make w the subject of the formula $y = 3w - 10$

.....

(Total for Question 25 is 2 marks)

23 Ben is trying to make m the subject of $p = \frac{m}{3} + 5$

Here is his working.

$$p - 5 = \frac{m}{3}$$

$$3 \times p - 5 = m$$

$$m = 3p - 5$$

Ben's answer is wrong.

(a) What mistake has Ben made?

.....

.....

.....

(1)

(b) Factorise fully $2x^3y + 4xy^2$

.....

(2)

(Total for Question 23 is 3 marks)