

Name: _____

GCSE (1 – 9)

Changing the Subject of a Formula

Instructions

- Use **black** ink or ball-point pen.
- Answer all Questions.
- Answer the Questions in the spaces provided
– *there may be more space than you need.*
- Diagrams are **NOT** accurately drawn, unless otherwise indicated.
- You must **show all your working out.**

Information

- The marks for each Question are shown in brackets
– *use this as a guide as to how much time to spend on each Question.*

Advice

- Read each Question carefully before you start to answer it.
- Keep an eye on the time.
- Try to answer every Question.
- Check your answers if you have time at the end

1 $f = 5c - 8$

Make c the subject of the formula.

.....
(Total for question 1 is 2 marks)

2 $u = 4t - 21$

Make t the subject of the formula.

.....
(Total for question 2 is 2 marks)

3 $x = 3y - 2$

Make y the subject of the formula.

.....
(Total for question 3 is 2 marks)

4 $m = 5n + 2p$

Make p the subject of the formula.

.....
(Total for question 4 is 2 marks)

5 $a = 3c - 2$

Make c the subject of the formula.

.....
(Total for question 5 is 2 marks)

6 $P = 3a + 3b$

Make a the subject of the formula.

.....
(Total for question 6 is 2 marks)

7 Make n the subject of $m = n^2 + 3$

.....
(Total for question 7 is 2 marks)

8 Make a the subject of $v = u + at$

.....
(Total for question 8 is 2 marks)

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

.....
(Total for question 9 is 2 marks)

10 Make b the subject of $a = \sqrt{\frac{b+2}{5}}$

.....
(Total for question 10 is 3 marks)

11 Make b the subject of $A = 3b + 9$

.....
(Total for question 11 is 2 marks)

12 Make x the subject of $y = 3x - 2$

.....
(Total for question 12 is 2 marks)

13 Make x the subject of $y = \frac{1}{2}x + 6$

.....
(Total for question 13 is 2 marks)

14 Make x the subject of $y = \frac{2}{5}x - 12$

.....
(Total for question 14 is 3 marks)

15 Make x the subject of $5x + 6y + 12 = 0$

.....
(Total for question 15 is 2 marks)

16 Make x the subject of $y = x^3 - 5$

.....
(Total for question 16 is 2 marks)

17 Make x the subject of $y = \frac{2x + 3}{4}$

.....
(Total for question 17 is 3 marks)

18 Make a the subject of $x = 3(a + 9)$

.....
(Total for question 18 is 2 marks)

19 $a = \frac{3 + c}{b}$

Make b the subject of the formula.

.....
(Total for question 19 is 2 marks)

20 $d = \sqrt{\frac{3h}{2}}$

Make h the subject of the formula.

.....
(Total for question 20 is 3 marks)