

# Substitution

## November 2022 Paper 2

- 8 Safiya wants to hire a van.  
She uses this rule to work out the cost of hiring a van for a number of days.

$$\text{Cost} = \text{£}45 \times \text{number of days}$$

Safiya is going to hire the van for 7 days.

Work out the cost.

£.....

**(Total for Question 8 is 2 marks)**

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## November 2023 Paper 1

12  $P = 2g + 4h$

- (a) (i) Work out the value of  $P$  when  $g = 3$  and  $h = 5$

$P = \dots\dots\dots$   
(2)

- (ii) Work out the value of  $g$  when  $P = 38$  and  $h = 3$

$g = \dots\dots\dots$   
(2)

$V = 3r - q$

- (b) Work out the value of  $V$  when  $r = -3$  and  $q = 2$

$V = \dots\dots\dots$   
(2)

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**(Total for Question 12 is 6 marks)**

## June 2024 Paper 2

$$T = x + 2y$$

$$x = 3 \text{ and } y = -4$$

13 (b) Work out the value of  $T$ .

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

(2)

June 2022 Paper 1

14  $y = 6x - 5$

Work out the value of  $y$  when  $x = 4$

$y = \dots\dots\dots$

**(Total for Question 14 is 2 marks)**

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June 2020 Paper 2

15  $T = 3x + 4y$

(a) Work out the value of  $T$  when  $x = 5$  and  $y = -7$

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(2)

(b) Work out the value of  $y$  when  $T = 38$  and  $x = 6$

.....  
(2)

**(Total for Question 15 is 4 marks)**

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## June 2024 Paper 2

22 The number of hours,  $H$ , that some machines take to make 5000 bottles is given by

$$H = \frac{72}{n} \quad \text{where } n \text{ is the number of machines.}$$

On Monday, 6 machines made 5000 bottles.

On Tuesday, 9 machines made 5000 bottles.

The machines took more time to make the bottles on Monday than on Tuesday.

How much more time?

..... hours

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**(Total for Question 22 is 2 marks)**

June 2022 Paper 3

23  $T = 4m^2 - 11$

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

$T = \dots\dots\dots$   
(2)

June 2024 Paper 3

29  $w = 40 - t^2$

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

$w = \dots\dots\dots$

(2)