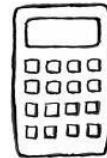


Name:

Teacher
Assessment



Unit 3 - Topic 1 - F
Simplifying and Substitution

Section A

Substitution

Grade C

1. (a) Find the value of $3x + 4y$

- (i) when $x = 2$ and $y = 5$

.....
.....

Answer

(2)

- (ii) when $x = 6$ and $y = -3$

.....
.....

Answer

(2)

- (b) Find the value of $a^3 + b^2$ when $a = 2$ and $b = 5$

.....
.....

Answer

(2)

(Total 6 marks)

2. (a) Find the value of $3x + 5y$ when $x = -2$ and $y = 4$

.....

Answer

(2)

- (b) Find the value of $3a^2 + 5$ when $a = 4$

.....

Answer

(2) (Total 4 marks)

3. Use the formula $v = u + at$ to find the value of v when $u = -10$, $a = 1.8$ and $t = 3.7$

.....
.....

Answer

(Total 2 marks)

4. If $x = 4$ and $y = -3$, find the value of $3x - 2y$

.....
.....

Answer.....

(Total 2 marks)

5. (a) Find the value of $3p + 2q$ when $p = 7$ and $q = -4$

.....
.....

Answer

(2)

- (b) Find the value of $x^2 + y^2$ when $x = -5$ and $y = 3$

.....
.....

Answer

(2)

- (c) Use the formula $R = 5e - 3f$ to find the value of e when $R = 6.4$ and $f = 4.2$

.....
.....

Answer $e =$

(3)(Total 7 marks)

6. Find the exact value of $\frac{1}{a} + \frac{1}{b}$ when $a = 0.5$ and $b = -2$

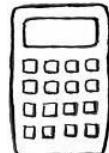
.....
.....
.....

Answer

(Total 2 marks)

Success:

Target:



Section B

Simplifying

Grade F → C

1. Simplify the expression

$$2c + 6d + 4c - 8c$$

.....
.....

Answer

(Total 2 marks)

2. Simplify

$$10d + 3e - 2d - 7e$$

.....
.....

Answer

(Total 2 marks)

3. Simplify the following

(a) $3x + 2x - x$

.....

Answer

(1)

(b) $5x + 3y - 2x + 4y$

.....

Answer

(2)

(c) $3 \times a \times 4$

.....

Answer

(1)

(Total 4 marks)

4. (i) Simplify $n + 3p - n + 7p$

.....

Answer

(2)

- (ii) Simplify $2n \times 5n$

.....

Answer

(1)

(Total 3 marks)

5. Simplify $(2xy^2)^3$

.....

.....

Answer

(Total 2 marks)

6. (a) Expand $3(4y + 1)$

.....

.....

Answer.....

(1)

- (b) Expand $4x(x^2 + 5)$

.....

.....

Answer.....

(2)

(Total 3 marks)

7. Expand and simplify

$$5(2a - c) + 4(3a + 2c)$$

.....
.....

Answer

(Total 2 marks)

8. Expand and simplify

$$4(3d - 2e) - (2d - 5e)$$

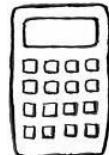
.....
.....
.....

Answer

(Total 2 marks)

Success:

Target:



Section C

Factorising

Grade C

1. Factorise $6a - 10$

.....

Answer

(Total 1 mark)

2. Factorise $2x + 6$

.....
.....

Answer

(Total 1 mark)

3. Factorise completely $2a^2 - a$

.....
.....

Answer

(Total 2 marks)

4. (a) Factorise $10p - 4$

.....

Answer

(1)

- (b) Factorise $q^2 + 3q$

.....

Answer

(1)

- (c) Factorise $r^2 - r$

.....

Answer

(1)

(Total 3 marks)

5. (a) Factorise $4c + 12$

.....

Answer

(1)

- (b) Factorise $x^2 + 5x$

.....

Answer

(2)(Total 3 marks)

6. (a) Factorise $10a + 5$

.....

Answer

(1)

- (b) Factorise $c^2 - 4c$

.....

Answer

(2)

(Total 3 marks)

7. (a) Factorise $3x - 6$

.....

Answer

(1)

- (b) Factorise $x^2 - 2x$

Answer

(2)

(Total 3 marks)

8. Factorise completely $12y^2 - 8y$

.....

.....

Answer

(Total 2 marks)

Success:

Target: