

General Mathematics '19

PAPER 2 Answer Booklet

Fill in the codes for the province and school and your 3-digit candidate number.

Year		Province		School			Candidate Number		
1	9								

Write your name and school in the spaces provided.

Candidate Name: ANSWER KEY

School Name: _____

This answer booklet has sections created for each question.

All answers must be written in this booklet and in the appropriate spaces provided.

	SCORE	Marker 1	Marker 2
Question 1			
Question 2			
Question 3			
Question 4			
Question 5			
Question 6			
Question 7			
Question 8			
Question 9			
Question 10			
TOTAL			

Nade Anwar Palitalla 25/03/19
Jeff Ambler 25/03/19
A Julius 28/03/2019.

QUESTION 1

a)

16 ✓₁

(1 mark)

b)

100 ✓₁

(1 mark)

c)

27 ✓₁

(1 mark)

d)

42 ✓₁

(1 mark)

e)

7 ✓₁

(1 mark)

total for this question

Marker 1 Marker 2

QUESTION 2

a)

Positive ✓₁

(1 mark)

b)

1.2 ✓₁

(1 mark)

c)

13.5 ✓₁

(1 mark)

d)

$$X = \frac{(42 - 1.5)}{1.2} \checkmark_1$$

$$= 33.75 \checkmark_1$$

(2 marks)

total for this question

Marker 1 Marker 2

QUESTION 3

a)

$$50,000 \times (1.08)^4 - 50,000 \quad \checkmark_1$$

$$= 18,024.45 \quad \checkmark_1$$

(2 marks)

b)

$$\frac{50,000 \times (1.08)^5 \quad \checkmark_1}{26 \times 5 \quad \checkmark_1}$$

$$= 565.13 \quad \checkmark_1$$

(3 marks)

total for this question

Marker 1 Marker 2

QUESTION 4

a)

$$K1,100 \quad \checkmark_1$$

(1 mark)

b)

$$K69.23 \quad \checkmark_1$$

(1 mark)

c)

$$3,800 \times 0.3 = K1,140 \quad \checkmark_1$$

(1 mark)

d)

$$45,000 \times 0.7 = K31,500 \quad \checkmark_1$$

(2 marks)

total for this question

Marker 1 Marker 2

*
AS
25/08/19

*
AS
25/08/19

QUESTION 5

a)

$$80^\circ \quad \checkmark_1$$

(1 mark)

b)

$$70^\circ \quad \checkmark_1$$

(1 mark)

c)

$$30^\circ \quad \checkmark_1$$

(1 mark)

d)

$$2w + 30 = 110 \quad \checkmark_1$$

$$w = \frac{110 - 30}{2} = 40 \quad \checkmark_1$$

(2 marks)

total for this question

Marker 1 Marker 2

QUESTION 6

a)

$$333^\circ \quad \checkmark_1$$

(1 mark)

b)

$$270^\circ \quad \checkmark_1$$

(1 mark)

c)

$$63^\circ \quad \checkmark_1$$

(1 mark)

d)

$$\frac{5}{\sin 63} = \frac{PO}{\sin 25} \quad \checkmark_1$$

$$PO \approx 2.4 \text{ km} \quad \checkmark_1$$

(2 marks)

total for this question

Marker 1 Marker 2

QUESTION 7.

a)

£50,000 ✓₁

(1 mark)

b)

10 years ✓₁

(1 mark)

c)

£14,000 ✓₁

(1 mark)

d)

£34,000 ✓₁

(1 mark)

e)

$\frac{3}{5} \times 50,000 = £30,000$ ✓
Corresponds to 4 years ✓₁

(1 mark)

total for this question

Marker 1 Marker 2

QUESTION 8.

a)

$$\frac{3\sqrt{3}}{\sqrt{3}} \times \frac{\sqrt{3}}{\sqrt{3}} = \frac{3\sqrt{3}+3}{3} = 1+\sqrt{3}$$

(accept $\sqrt{3}+1$) ✓₁

(2 marks)

b)

$$-3 < x \leq -1$$
 ✓₁

(1 mark)

c)

$$\left[\left(\frac{1}{2}\right)^2\right]^2 \left(\frac{2}{3}\right)^2 = \left(\frac{1}{16}\right)\left(\frac{4}{9}\right) = \frac{1}{36}$$
 ✓₁

(2 marks)

total for this question

Marker 1 Marker 2

QUESTION 9.

a)

~~SA = \pi r^2 + 2\pi rh~~

$$SA = \pi r^2 + 2\pi rh$$

$$= \pi \times 1.2^2 + 2\pi \times 1.2 \times 3$$

$$= 8.64\pi \text{ m}^2$$

$$= 27.14 \text{ m}^2$$

(3 marks)

b)

~~V = \frac{2}{3}\pi r^2 h~~

$$V = \frac{2}{3}(\pi \times 1.2^2 \times 3)$$

$$= \frac{2}{3}(4.32\pi)$$

$$= 9.05 \text{ m}^3$$

(2 marks)

total for this question

Marker 1 Marker 2

QUESTION 10

a)

$$y = 0$$

(1 mark)

b)

$$\frac{1}{2} = 0.5$$

(1 mark)

c)

$$\log(x^2) - (\log y^3 - \log y^2)$$

$$= \log(x^2) - \log y$$

$$= \log\left(\frac{x^2}{y}\right)$$

(3 marks)

total for this question

Marker 1 Marker 2