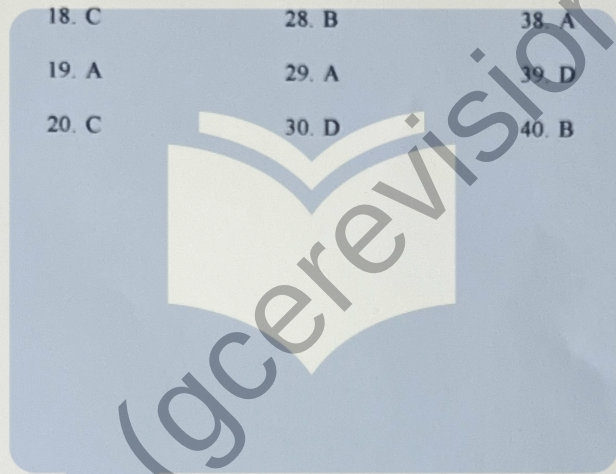


**BAEBOCK MARCH 2025**  
**MARKING GUIDE PAPER 1**  
**MATHEMATICS 0570**

|       |       |       |       |       |
|-------|-------|-------|-------|-------|
| 1. C  | 11. A | 21. C | 31. B | 41. C |
| 2. D  | 12. B | 22. B | 32. B | 42. C |
| 3. D  | 13. C | 23. B | 33. C | 43. D |
| 4. C  | 14. C | 24. A | 34. D | 44. A |
| 5. D  | 15. C | 25. A | 35. B | 45. A |
| 6. B  | 16. B | 26. A | 36. A | 46. B |
| 7. A  | 17. D | 27. B | 37. B | 47. A |
| 8. D  | 18. C | 28. B | 38. A | 48. A |
| 9. C  | 19. A | 29. A | 39. D | 49. A |
| 10. C | 20. C | 30. D | 40. B | 50. B |





BAEBOC 2025

MATHS 570 MARKING GUIDE PAPER TWO

1.  $3x + x + 500000 + x = 5000000$   
 $5x + 4500000$

$x = 900000$  CFA

Eldest child = 2700000 FCFA

Middle child = 1400000 CFA

2. a)  $r = \sqrt{13^2 - 12^2} = 5$  cm

b)  $\text{vol} = \frac{1}{3} \times \frac{22}{7} \times 12 \times 5^2 = 244.4 \text{ cm}^3$

c)  $\frac{244.4}{V} = \left(\frac{5}{10}\right)^3 \Rightarrow V = 1955.2 \text{ cm}^3$

3. (a)  $2^{2x+4} = 2^{3x} \Rightarrow x = 4$

b)  $15x + 18 = 2x \Rightarrow x = -\frac{18}{13}$

4. a)  $\begin{pmatrix} 0 & 3 & 0 & 0 \\ 3 & 0 & 2 & 0 \\ 0 & 2 & 0 & 1 \\ 1 & 0 & 0 & 2 \end{pmatrix}$

b) 5

c) 2

5. a)  $\vec{AB} = \begin{pmatrix} -7 \\ 4 \end{pmatrix}$

b) direction =

$\tan^{-1}\left(-\frac{4}{7}\right) + 180^\circ = 150.2^\circ$

c)  $7y = -4x + 23$

6. a)  $\begin{pmatrix} 0 & -1 \\ -1 & 0 \end{pmatrix}$

b)  $P'(0, 6), Q'(-2, 6), R'(-2, 4)$

7. a)  $n(A \cap B') = 21 - x, n(A' \cap B) = 17 - x$

b)  $x = 9$

8. a)  $f^{-1}(x) = \frac{y-4}{3}, f^{-1}(13) = 3$

b)  $f^{-1}g(x) = \frac{x-22}{15}$

9. a)  $t = 3.6$

b)  $g = \frac{4\pi^2 l}{T^2}$

10. a)  $\bar{x} = \frac{\sum xf}{\sum f} = \frac{473}{100} = 4.73$

b) median = 5

SECTION B

1. i) a)  $\text{VAT} = \frac{2}{100} \times 32000000 = 640000$  frs

b) Balance = 32000000 - 640000 = 31360000 frs

c) Remaining = 31360000 - 1985000 = 29375000

ii)  $10x + 9y = 85 \dots \dots \dots (i)$

$10x + 9y = 85 \dots \dots \dots (ii)$

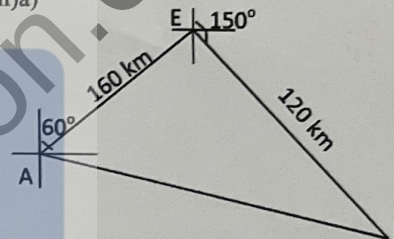
Solving (i) and (ii) gives  $x = 4, y = 5$

2. i) a)  $\triangle TBA$  is isosceles,  $\angle BT = 65^\circ$

b)  $\angle OBT = 90^\circ \Rightarrow \angle OBA = 90 - 65 = 25^\circ$

c)  $\angle ACB = \angle ABT = 65^\circ$

ii) a)



b)  $AB = \sqrt{160^2 + 120^2} = 200 \text{ km}$

c) bearing  $60 + \tan^{-1}\left(\frac{120}{160}\right) = 96.9$

iii)  $\frac{\text{Area } ABC}{\text{Area } ADE} = \left(\frac{5}{3}\right)^2$

Area ABC =  $\frac{25}{9} \times 6 = 16.6 \text{ cm}^2$

3. i)

|   |    |      |    |      |    |    |      |
|---|----|------|----|------|----|----|------|
| x | 40 | 45   | 50 | 55   | 60 | 70 | 80   |
| y | 35 | 39.2 | 41 | 41.1 | 40 | 35 | 27.5 |

b) graph

c) 32 km/pg

d) 53 kmpg



ii) a)  $\overrightarrow{AB} = -a + b$ ,  $\overrightarrow{AP} = \frac{2}{3}(-a + b)$

b)  $\overrightarrow{MA} = \frac{1}{2}a$ ,  $\overrightarrow{MP} = \overrightarrow{MA} + \overrightarrow{AP} = -\frac{1}{6}a + \frac{2}{3}b$

4. a)  $P(\text{swim}) = \frac{1}{2}$

b)  $P(GS) = \frac{5}{18}$

c)  $P(BSF) = \frac{1}{9}$

d) i)  $S'CB$

ii)  $G \cap F \neq \emptyset$

e) Some girls are swimmers