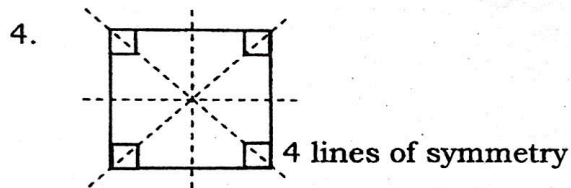


KCCCA P.7 MATH MOCK MARKING GUIDE 2024
SECTION A

1.
$$\begin{array}{r} 12 \\ + 17 \\ \hline 29 \end{array}$$

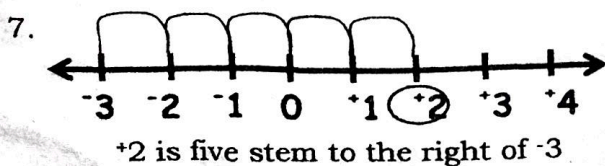
2.
$$\begin{array}{l} 2y + y + 3y \\ 3y + 3y \\ \hline 6y \end{array}$$

3.
$$\begin{aligned} 1101_{\text{two}} &= (1 \times 2^3) + (1 \times 2^2) + (0 \times 2^1) + (1 \times 2^0) \\ &= (1 \times 2 \times 2 \times 2) + (1 \times 2 \times 2) + (0 \times 1) + (1 \times 1) \\ &= (2 \times 4) + (2 \times 2) + (0 \times 1) + (1 \times 1) \\ &= 8 + 4 + 0 + 1 \\ &= 12 + 1 \\ &= \underline{13_{\text{ten}}} \end{aligned}$$

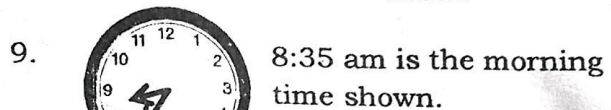


5.
$$\begin{array}{l} 2^n = 8 \\ 2^n = 2^3 \\ \begin{array}{l} 2 \times 4 \\ 2 \times 2 \end{array} \\ \hline 1 \\ 2^n \rightarrow 3^1 \\ 2^n = 2^3 \\ \underline{n = 3 \text{ elements}} \end{array}$$

6.
$$\begin{aligned} \sqrt{0.36} &= \sqrt{\frac{36}{100}} \\ &= \frac{6}{10} \\ &= \underline{0.6} \end{aligned}$$

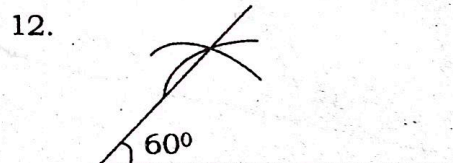


8.
$$\begin{aligned} \frac{\text{Sum of item}}{\text{no. of item}} &= \text{mean} \\ \frac{(x + 4 + 6 + 8 + 9)}{8} &= 6 \times 5 \\ X + 10 + 17 &= 30 \\ X + 27 - 27 &= 30 - 7 \\ x &= \underline{3} \end{aligned}$$



10.
$$\begin{array}{l} (8.5 \times 6) + (8.5 \times 14) \\ \text{shared} \\ 8.5 (6 + 14) \\ 8.5 (20) \\ \frac{85}{10} \times 20 \\ 85 \times 2 \\ \hline 170 \end{array} \quad \begin{array}{l} \text{Pw} \\ 85 \\ \times 2 \\ \hline 170 \end{array}$$

11. Next number
2, 3, 5, 7, 11 (Prime numbers)



13. Length = 1 numeral (last pole - 1st pole)
= 5m (62 - 1)
= 5m (61)
= 5m x 61
= 305 metres

14.
$$\begin{aligned} (9 \times 10^2) + (7 \times 10^0) + (8 \times 10^{-1}) \\ &= (9 \times 100) + (7 \times 1) + \frac{8}{10} \\ &= 900 + 7 + 0.8 \\ &= \underline{907.8} \end{aligned}$$