

SIDDEEQ PUBLIC SCHOOL

Answer Key

ADMISSION to GRADE: 6

MATHEMATICS

1. (i) 3 (ii) 9 (iii) 10 000 (iv) Rs 10

2. (i) $6.24 \div 2.6$

Method #1:

$$= \frac{624}{100} \div \frac{26}{10}$$

$$= \frac{624}{100} \times \frac{10}{26}$$

$$= \frac{624}{10} \times \frac{1}{26}$$

$$= \frac{24}{10} = 2.4$$

Method #2:

$$= \frac{6.24}{2.6}$$

$$= \frac{6.24 \times 10}{2.6 \times 10}$$

$$= \frac{62.4}{26}$$

$$= 2.4$$

$$\begin{array}{r} 2.4 \\ \hline 26 \overline{) 62.4} \\ \underline{-52} \\ 104 \\ \underline{104} \\ 0 \end{array}$$

(ii) **Two - fifths** = $\frac{2}{5}$

$$\begin{aligned} \text{Two fifths as percentage} &= \frac{2}{5} \times 100\% \\ &= 2 \times 20\% = 40\% \end{aligned}$$

3. Sum of temperature of 4 different days = $16^\circ \text{C} + 12^\circ \text{C} + 7^\circ \text{C} + 9^\circ \text{C} = 44^\circ \text{C}$

Number of days = 4

$$\begin{aligned} \text{Average temperature} &= \frac{\text{sum of temperature on 4 days}}{4} \\ &= \frac{44^\circ \text{C}}{4} \\ &= 11^\circ \text{C} \end{aligned}$$

So average temperature is 11°C .

4. Weight of a box of chocolate = 80g.

$$\begin{aligned} \text{Amount of chocolate Ali ate on Monday} &= \frac{1}{8} \text{ of the chocolate} \\ &= \frac{1}{8} \times 80\text{g} = 10\text{g} \end{aligned}$$

Amount of chocolate Ali ate on Tuesday = 20g

Amount of chocolate he ate on both days = $10\text{g} + 20\text{g} = 30\text{g}$

Amount of chocolate left with him = $80\text{g} - 30\text{g} = 50\text{g}$

5. To find the **maximum length** of each equal-sized piece cut from both ribbons, we should calculate the **HCF** of the given lengths .

HCF of 96 & 84

$$\begin{array}{r|l} 2 & 96, 84 \\ \hline 2 & 48, 42 \\ \hline 3 & 24, 21 \\ \hline & 8, 7 \end{array}$$

$$\text{HCF of 96 \& 84 is } 2 \times 2 \times 3 = 4 \times 3 = 12$$

Therefore, the maximum possible length of each piece of ribbon Sara can cut is **12m**.