THE PREP SCHOOL

Answer key

Admission to Grade: 5

Mathematics

1. (i) 43 019   **(ii)** factors   **(iii)** 0.45   **(iv)** >

2. i)

$12 = 2 \times 2 \times 3$

$18 = 2 \times 3 \times 3$

HCF = Product of common factors

= 2×3

= 6

ii) 53.47×69

$$
\begin{array}{r}
5\ 3.\ 4\ 7 \\
\times \quad\quad 6\ 9 \\
\hline
4\ 8\ 1\ 2\ 3 \\
+\ 3\ 2\ 0\ 8\ 2\ 0 \\
\hline
3\ 6\ 8\ 9.4\ 3
\end{array}
$$

So, $53.47 \times 69 = 3\ 689.43$

3. i) $\dfrac{17}{8} \div 17$

$= \dfrac{\overset{1}{17}}{8} \times \dfrac{1}{\underset{1}{17}}$

$= \dfrac{1 \times 1}{8 \times 1}$

$= \dfrac{1}{8}$

OR

$\dfrac{17}{8} \div 17$

$= \dfrac{17}{8} \times \dfrac{1}{17}$

$= \dfrac{17 \times 1}{8 \times 17}$

$= \dfrac{\dfrac{1}{17}}{\dfrac{136}{8}}$

$= \dfrac{1}{8}$

ii)

$$
\begin{array}{ccc}
 & \text{hours} & \text{minutes} \\
 & 8 & 3\ 0 \\
- & 2 & 2\ 8 \\
\hline
 & 6 & 0\ 2
\end{array}
$$

8 hours 30 minutes – 2 hours 28 minutes
= 6 hours 02 minutes

4. Distance from home to mosque $= \dfrac{3}{5}$ km

Distance from mosque to park $= \dfrac{6}{15}$ km

Total distance covered from home to park $= \dfrac{3}{5} + \dfrac{6}{15}$

$= \dfrac{3 \times 3}{5 \times 3} + \dfrac{6}{15}$

$= \dfrac{9}{15} + \dfrac{6}{15}$

$= \dfrac{9 + 6}{15}$

= 1 km

5. Total number of books = 1 027

Number of boxes = 13

Number of books in each box = $1\ 027 \div 13$

= 79

$$
\begin{array}{r}
7\ 9 \\
13\ \overline{)\ 1\ 0\ 2\ 7} \\
-\ \ \ 9\ 1 \\
\hline
1\ 1\ 7 \\
-\ 1\ 1\ 7 \\
\hline
0
\end{array}
$$