

**SIDDEEQ PUBLIC SCHOOL**

**Answer Key**

**ADMISSION to GRADE: 7 (Group B)**

**MATHEMATICS**

1. (i) 6      (ii) 25      (iii)  $>$       (iv)  $\frac{x}{2}$

2. (i) $16x + 4 = 52$ $16x = 52 - 4$ $16x = 48$ $x = \frac{48}{16}$ $x = 3$		(ii) $[2y^2 - \{ (y^2 + 2y^2) - y^2 \}]$ $= [2y^2 - \{ 3y^2 - y^2 \}]$ $= [2y^2 - \{ 2y^2 \}]$ $= [2y^2 - 2y^2] = 0$
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3. **Highest common factor** =  $5 \times 2^2$   
 $= 5 \times 4$   
 $= 20$

4. **1 km = 1000m      2 km = 2000m**

**Ratio of the distances covered by three cars**

$$\begin{aligned} &= 1200 : 2000 : 800 \\ &= 12 : 20 : 8 \\ &= 6 : 10 : 4 \\ &= 3 : 5 : 2 \end{aligned}$$

5. **Method #1:**

Original price of book = Rs 6000

Reduction % = 12%

Amount of reduction = 12% of original price

$$\begin{aligned} &= \frac{12}{100} \times \text{Rs } 6000 \\ &= 12 \times \text{Rs } 60 \\ &= \text{Rs } 720 \end{aligned}$$

$$\begin{aligned} \text{New price of book} &= \text{Rs } 6000 - \text{Rs } 720 \\ &= \text{Rs } 5280 \end{aligned}$$

**Method # 2:**

$$\begin{aligned} \text{New price of book} &= (100 - 12)\% \text{ of original price of book} \\ &= 88\% \text{ of Rs } 6000 \\ &= \frac{88}{100} \times \text{Rs } 6000 \\ &= 88 \times \text{Rs } 60 \\ &= \text{Rs } 5280 \end{aligned}$$