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**G.D.GOENKA PUBLIC SCHOOL**

**Subject: Mathematics (6th)**

**Aspect: Home- Assignment**

**Date: 16-10-2020**

**Chapter No.12 (Ratio and Proportion)**

**Exercise 12.1**      **Page no: 251**

**Q5. Fill in the following blanks:**

**$15 / 18 = \square / 6 = 10 / \square = \square / 30$  [Are these equivalent ratios?]**

**Solution:**

**$15 / 18 = 5 / 6$  in its simplest form.**

**$5 / 6 = \square / 6$**

**$(5 \times 1) / (6 \times 1) = 5 / 6$**

**$= 5 / 6$**

**$5 / 6 = 10 / \square$**

**$= (5 \times 2) / (6 \times 2) = 10 / 12$**

**$5 / 6 = \square / 30$**

**$= (5 \times 5) / (6 \times 5) = 25 / 30$**

**Hence, 5, 12 and 25 are the numbers which come in the blanks respectively.**

**Yes, all are equivalent ratios.**

**Q6. Find the ratio of the following:**

**(a) 81 to 108**

**(b) 98 to 63**

**(c) 33 km to 121 km**

**(d) 30 minutes to 45 minutes**

**Solution:**

**(a) 81 / 108**

$$= 81 \div 9 / 108 \div 9$$

$$= 9 / 12$$

$$= 9 \div 3 / 12 \div 3$$

$$= 3 / 4$$

$$= 3 : 4$$

(b)  $98 / 63$

$$= (98 \div 7) / (63 \div 7)$$

$$= 14 / 9$$

$$= 14 : 9$$

(c)  $33 / 121$

$$= (33 \div 11) / (121 \div 11)$$

$$= 3 / 11$$

$$= 3 : 11$$

(d)  $30 / 45$

$$= (30 \div 5) / (45 \div 5)$$

$$= 6 / 9$$

$$= (6 \div 3) / (9 \div 3)$$

$$= 2 / 3$$

$$= 2 : 3$$

Write Q5 and Q6 in your mathematics notebook.