CLASS 8

DIRECT AND INVERSE PROPORTIONS

DIRECT VARIATION

EXERCISE

Q.1 Fill in the tables

(a)

x (number of men)	2	3		16	48
Y (time taken)	24		8		

(b)

x (men)	8	2	18	9		
y (days)	9				12	1

(c)

x (men)	12		28		6
y (time)	7	4		42	

- Q.2 If 15 books cost M35, what do M21 books cost?
- **Q.3** A fort had provisions for 150 men for 50 days. After 15 days 25 men left fort. How long will food last at the same rate for remaining men?
- Q.4 If 8 men can reap 80 hectares in 24 days, how many hectares can 36 men reap in 30 days.

CLASS 8

FILL IN THE BLANKS

- Q.5 If A can do a piece of work in n days, then work done by A in 1 day is _____ part of total work.
- Q.6 A and B can together do a piece of work in 15 days B alone can do it in 20 days. A can do it alone in _____ days.
- **Q.7** Speed 36 km/h = speed _____ m/sec
- **Q.8** If x > 0, and 2x + 5 : x + 1 : : x + 4 and 2x 2, then the value of x is _____.
- Q.9 The weight of 48 similar books is 30 kg. The weight of 8 similar books is ______ kg.
- **Q.10** Shyam is twice as good workman as Ram. Ram can complete a work in 6 days. The time taken by shyam to complete the same work is _____.

ANSWER KEY

1. (a) 16, 6, 3, 1

(b) 36, 4, 8, 6, 72

(c) 21, 3, 2, 14

- **2.** M49
- **3.** 42 days
- **4.** 450 hectares.
- 5. $\frac{1}{n}$
- **6.** 60 days.
- 7. 10 m/sec.
- **8.** x = 2
- **9**. 5kg
- **10.** 3 days