

I. Answer in one words:

1. Direct proportion 2. $xy = k$ (or) $x \propto \frac{1}{y}$ (or) $x_1y_1 = x_2y_2$

3. a) Direct proportion (b) Direct proportion (c) Indirect proportion

II. Answer the following:

4.

	x_1	x_1
No. of words	600	?
Time taken in Min	30	

y_1 y_2

Since it is a direct variation $\frac{x_1}{y_1} = \frac{x_2}{y_2}$

$$\frac{600}{30} = \frac{x_2}{9} \quad \frac{600^{20} \times 9}{30} = x_2 \quad 180 = x_2$$

Hence Anu typed 180 words for 9 minutes. Ans: 180 words

5.

	x_1	x_1
No. of men	12	?
No. of days	8	6

y_1 y_2

Since it is an indirect proportion $x_1y_1 = x_2y_2$

$$12 \times 8 = x_2 \times 6 \quad \frac{12^2 \times 8}{6} = x_2 \quad x = 16$$

Hence 16 men are required to complete the work. Ans: 16mens

6.

	x_1	x_1
No. of scouts	500	750
No. of days	21	?

y_1 y_2

Since it is an indirect variation $x_1y_1 = x_2y_2$

$$500 \times 21 = 750 \times ? \quad \frac{500^{10^2} \times 21^7}{750_{1,5s}} = y_2 \quad y_2 = 14$$

Hence, the food would last for 14 days.