Subject: - Mathematics **PRACTICE PAPER** **CBSE-8th**

Topic: - Direct & Inverse Variation

1. Reema types 540 words during half an hour. How many words would she type in 6 minutes? **Ans. 108**

2. Suneeta types 1080 words in one hour. What is her GWAM (gross words a minute rats)? **Ans. 18**

3. 11 men can dig $6\frac{3}{4}$ metre long trench in one day. How many men should be employed for digging 27-metre-long trench of the same type in one day? **Ans. 44 men**

4. 1000 soldiers in a fort had enough food for 20 days. But some soldiers were transferred to another fort and the food lasted for 25 days. How many soldiers were transferred? **Ans. 200**

5. 120 men had food provisions for 200 days. After 5 days, 30 men died due to an epidemic. How long will the remaining food last? **Ans. 260 days**

6. If x and y vary inversely as each other and

i) $x = 3$ when $y = 8$, find y when $x = 4$. **Ans. $y = 6$**

ii) $y = 35$, find x when constant of variation = 7 **Ans. $x = \frac{1}{5}$**

7. A and B can do a piece of work in 12 days, B and C in 15 days, C and A in 20 days. In how many days will they finish it together and separately.

Ans. Together = 10 days, A = 30, B = 20, C = 60

8. A and B can polish the floors of a building in 25 days. A alone can do $\frac{1}{3}$ of this job in 15 days. In how many days can B alone polish the floors of the building?

Ans. $56\frac{1}{4}$ days

9. 5 men can complete a job in 8 days. How many days will it take if 12 men do the job? **Ans. $3\frac{1}{3}$ days**

10. Raj Sweeps 600 m long railway platform in $2\frac{1}{2}$ hours. His wife Ritu sweeps $\frac{2}{3}$ rd of the same platform in $1\frac{1}{2}$ hours. Who sweeps more speedily?

Ans. Raj = 240 m, Ritu = $266\frac{2}{3}$ m

11. A cistern can be filled by a tap in 6 hours and emptied by an outlet pipe in 8 hours. How long will it take to fill the cistern, if both the taps and the pipe are opened together?

Ans. 24 hours

12. Pipe A can fill an empty tank in 6 hours and pipe B in 8 hours. If both the pipes are opened and after 2 hours pipe A is closed, how much time B will take to fill the remaining tank?

Ans. $3\frac{1}{3}$ hours