



# THE TUITION

THE WAY TO PREPARE YOURSELF BY: - **RISHABH GUPTA**  
10 YEARS EXPERIENCE OF CBSE/ICSE

Subject: - Mathematics

## PRACTICE PAPER

**CBSE-8<sup>th</sup>**

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 rate)? **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  $x = 4$ .      ii)  $y = 35$ , find  $x$  when constant of variation = 7  
**Ans. i)  $y = 6$ , ii)  $x = \frac{1}{5}$**
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**