



Octahedral classes, kharadi
2nd floor, yashwant plaza, near bank of India,

Class 08 - Mathematics
direct inverse variation

Maximum Marks: 40

Time Allowed: 1 hour and 30 minutes

General Instructions:

Answer all questions

Section A

1. Rashmi has a road map with a scale of 1 cm representing 18 km. She drives on a road for 72 km. What would be her distance covered in the map ? 2
2. If x and y vary inversely as each other, and $x=10$ when $y=6$. Find y when $x=15$. 2
3. Decide if the data in the table show direct or inverse variation. 2

a.	x	1	3	5	0.5
	y	5	15	25	2.5
b.	x	1	3	4	0.5
	y	30	10	7.5	60

4. How long will a boy take to run around a square field of side 35m, if he runs at a speed of 9 km/hr? 2
5. Is the time taken for a journey and the distance travelled in a uniform speed in inverse proportion ? 2
6. Observe the following table and find if the variables (here x and y) are in inverse proportion. 3

x	90	60	45	30	20	5
y	10	15	20	25	30	35

7. Observe the following table and find if the variables (here x and y) are in inverse proportion. 3

x	50	40	30	20
y	5	6	7	8

8. Verify whether the following represents direct variation. 3

x	10	8	20	4
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y	25	20	50	10
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9. Two persons could fit new windows in a house in 3 days. One of the persons fell ill before the work started. How long would the job take now ? **3**

10. Two persons could fit new windows in a house in 3 days. How many persons would be needed to fit the windows in one day ? **3**

11. Observe the following table and find if x and y are directly proportional : **3**

x	5	8	12	15	18	20
y	15	24	36	60	72	100

12. Observe the following table and find if the variables (here x and y) are in inverse proportion. **3**

x	100	200	300	400
y	60	30	20	15

13. If y varies inversely as q, and y = 22 and q = 6, find q when y = 15. **3**

14. Observe the following table and find if x and y are directly proportional : **3**

x	20	17	14	11	8	5	2
y	40	34	28	22	16	10	4

15. Observe the following table and find if x and y are directly proportional : **3**

x	6	10	14	18	22	26	30
y	4	8	12	16	20	24	28