

Grade 8 Direct and Indirect Proportions Worksheets

Grade 8 Maths Direct and Inverse Proportions Multiple Choice Questions (MCQs)

1. If 25 metres of cloth costs of ₹ 1575, how many metres of it can be bought for ₹ 2016?

- (a) 30 m
- (b) 32 m
- (c) 36 m
- (d) None of these

2. A worker is paid ₹ 1110 for 6 days. If his total wages during a month are ₹ 4625, for how many days did he work?

- (a) 15 days
- (b) 25 days
- (c) 30 days
- (d) None of these

3. The length of the shadow of a 3 m high pole at a certain time of the day is 3.6 m. What is the length of the height of another pole whose shadow at that time is 54 m long?

- (a) 30 m
- (b) 40 m
- (c) 45 m
- (d) None of these

4. Traveling 900 km by rail costs ₹ 280. What would be the fare for a journey of 360 km when a person travels by the same class?

- (a) ₹ 118
- (b) ₹ 112
- (c) ₹ 119
- (d) None of these

5. If 8 kg sugar costs ₹ 148, how much sugar can be bought for ₹ 832.50?

- (a) 45 kg
- (b) 50 kg
- (c) 60 kg
- (d) None of these

6. The cost of 37 m of silk is ₹ 3145. What length of this silk can be purchased for ₹ 1445?

- (a) 15 m
- (b) 16 m

- (c) 17 m
- (d) None of these

7. If 22.5 m of a uniform iron rod weighs 85.5 kg, what will be the length of 22.8 kg of the same rod?

- (a) 5 m
- (b) 6 m
- (c) 7 m
- (d) None of these

8. Manoj types 540 words during half an hour, how many words would he type in 6 minutes?

- (a) 105
- (b) 106
- (c) 108
- (d) None of these

9. Rohit bought 12 registers for ₹ 156, find the cost of 7 such register.

- (a) ₹ 90
- (b) ₹ 91
- (c) ₹ 92
- (d) None of these

10. Pranshu takes 125 minutes in walking a distance of 100 m. What distance would he cover in 315 minutes?

- (a) 250 m
- (b) 252 m
- (c) 254 m
- (d) None of these

11. If 56 men can do a piece of work in 42 days, how many men will do it in 14 days?

- (a) 165
- (b) 166
- (c) 168
- (d) None of these

12. 120 men have food provision for 200 days. After 5 days, 30 men died due to the cancer. How long will the remaining food last?

- (a) 260 days
- (b) 275 days
- (c) 250 days
- (d) None of these

13. If x and y varies inversely as each other and $x = 10$ when $y = 6$. Find y when $x = 15$.

- (a) 5
- (b) 6
- (c) 4
- (d) None of these

14. Shreya cycles to her school at an average speed of 12 km/hr. It takes her 20 minutes to reach the school. If she wants to reach her school in 15 minutes, what would be her average speed?

- (a) 15 km/hr
- (b) 16 km/hr
- (c) 18 km/hr
- (d) None of these

15. 1000 soldiers in a fort has 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?

- (a) 100
- (b) 200
- (c) 800
- (d) None of these

16. If x and y varies inversely as each other and $x = 8$, when $y = 32$. Find y when $x = 16$:

- (a) 64
- (b) 16
- (c) 4
- (d) None of these

17. If x and y varies inversely as each other and $x = 8$, when $y = 10$. Find y when $x = 2$.

- (a) 40
- (b) 16
- (c) 4
- (d) None of these

18. If x and y varies inversely as each other and $x = 2$, when $y = 40$. Find y when $x = 20$.

- (a) 40
- (b) 16
- (c) 4
- (d) None of these

19. If x and y varies inversely as each other and $x = 8$, when $y = 10$. Find y when $x = 5$.

- (a) 40
- (b) 16
- (c) 4
- (d) None of these

20. If a and b varies inversely as each other and $a = 16$, when $b = 4$. Find b when $a = 32$.

- (a) 2
- (b) 8

- (c) 4
(d) None of these

Class 8 Maths Direct and Inverse Proportions Very Short Answer Type Questions

1. If the cost of 1 kg of sugar is ₹ 18, then what would be the cost of 3 kg sugar?
2. If the cost of 9 toys is ₹ 333, find the cost of 16 such toys.
3. A car can cover a distance 522 km on 36 litres of petrol. How far can it travel on 14 litres of petrol?
4. If 13 metres of a uniform iron rod weighs 23.4 kg then what will be the weight of 6 metres of the same rod?
5. A train covers a distance of 51 km in 45 minutes. How long will it take to cover 221 km?
6. If 15 oranges cost ₹ 70, what do 39 oranges cost?

Class 8 Maths Direct and Inverse Proportions Short Answer Type Questions

1. In a students hostel with 32 students, a fixed quantity of food lasts for 45 days. If 16 more students join in, then the food will last for how many days?
2. If $2 : 3 = x : 51$. Find x .
3. If $A : B = 2 : 3$ and $B : C = 4 : 5$ then. Find $A : C$.
4. If 628 persons can complete the work in 84 days then in how many days 1256 persons will complete the same work?

Class 8 Maths Direct and Inverse Proportion Long Answer Type Questions

1. Find the value of x and y if $x : y = 2 : 3$ and $2 : x = 1 : 2$
2. A car is moving at a uniform speed of 45 km/h.
(a) How far will it travel in 5 hours?
(b) Find the distance covered in 40 minutes.
3. If x and y are in inverse proportion. Find the value of a , b and c in the table:

x	25	15	b	10
y	3	a	4	c