

Subject: Maths

Class: 7-8

Topic: Direct Proportion

Levels: Basic, Intermediate, Advanced

Level: Basic

1. If 1 pen costs ₹10, find the cost of 5 pens. ?
2. A car travels 50 km in 1 hour. How far will it travel in 3 hours at the same speed? ?
3. If 4 notebooks cost ₹120, what is the cost of 1 notebook? ?
4. Rahul buys 2 kg of mangoes for ₹160. How much will 4 kg cost? ?
5. A worker earns ₹500 in 2 days. How much will he earn in 6 days? ?
6. If 3 liters of milk cost ₹150, find the cost of 10 liters. ?
7. A machine prints 20 pages in 1 minute. How many pages in 5 minutes? ?
8. If 5 packets of biscuits cost ₹50, find the cost of 12 packets. ?
9. A tailor uses 2 meters of cloth for 1 shirt. How much cloth for 8 shirts? ?
10. If 10 chocolates cost ₹200, how much do 3 chocolates cost? ?

Subject: Maths

Class: 7-8

Topic: Direct Proportion

Levels: Basic, Intermediate, Advanced

Level: Intermediate

1. If 8 kg of sugar costs ₹320, find the cost of 15 kg of sugar. ?
2. A map uses a scale where 2 cm represents 50 km. Find the distance for 10 cm. ?
3. If a pole 6m high casts a shadow of 4m, find the shadow of a 12m pole. ?
4. Priya types 450 words in 15 minutes. How many words can she type in 1 hour? ?
5. An airplane flies 1800 km in 3 hours. How long will it take to fly 3000 km? ?
6. If the weight of 12 sheets of paper is 40g, how many sheets weigh 1 kg? ?
7. A car consumes 5 liters of petrol for 80 km. How much petrol for 240 km? ?
8. If 15 oranges cost ₹105, how many oranges can be bought for ₹70? ?
9. The cost of 5 kg of wheat is ₹135. Find the cost of 8 kg of wheat. ?
10. If 7 meters of cloth costs ₹770, find the cost of 11 meters. ?

Subject: Maths

Class: 7-8

Topic: Direct Proportion

Levels: Basic, Intermediate, Advanced

Level: Advanced

1. The ratio of distance to time is constant. If $d = k \cdot t$, find k if $d=150$, $t=3$.
2. If x and y are in direct proportion and $x=5$ when $y=20$, find y when $x=8$.
3. A recipe for 4 people needs 500g of flour. Calculate flour needed for 14 people.
4. If ₹1000 earns ₹80 interest in a year, how much interest will ₹4500 earn?
5. A model of a ship has a mast 9cm high, while the actual mast is 12m. If the ship is 28m long, how long is the model?
6. If the thickness of a stack of 500 sheets is 3.5 cm, find the thickness of 275 sheets.
7. Amit cycles at 12 km/h. If distance D is directly proportional to time T , find D when $T=3.5$ hours.
8. 15 men can dig a trench in 8 hours (assume constant rate). How many men for a trench 3 times as long in same time?
9. If a taxi charges ₹15 per km after a fixed charge, is the total fare in direct proportion to distance? Explain.
10. Find the constant of variation π if the circumference C is directly proportional to diameter d .