

INTERNATIONAL INDIAN SCHOOL BURAIDAH

Worksheet for the Academic Year 2025-26

CLASS: VIII

SUBJECT: MATHEMATICS

DATE: 30-06-2025

LESSON 11: DIRECT AND INVERSE PROPORTIONS

1. If two quantities x & y are directly proportional, then the relation between x & y is-----
2. If two quantities x & y are in inverse proportion, then the relation between x & y is-----
3. Observe the table given below and find whether x and y are directly proportional:

x	3	5	7	9	12
y	6	10	14	18	24

4. The cost of 5m of cloth is ₹450. Then find the cost of 8m of cloth
5. If 15 workers can build a wall in 48 hours, how many workers will be required to do the same work in 30 hours
6. Rahul has enough money to buy 75 machines worth ₹200 each. How many machines can be buy if he gets a discount of ₹50 on each machine?
7. Ali takes 75 steps to cover a distance of 50m. How much distance will it cover in 375 steps
8. A machine in a juice factory fills 680 bottles in 5 hours. How many bottles will it fill in 3 hours
9. A bus travels 40 km in 30 minutes. If the speed of the bus remains same, how far can it travel in 3 hours
10. If a box of pen is given to 25 children, they will get 2 pens each. How many would each get, if the number of children is reduced by 10
11. If the weight of 25 precious stones is 50 grams. How many precious stones of the same type would weigh 4500kg
12. Amina has a road map with a scale of 1cm representing 25km. She drives on the road for 100km. What would be her distance covered on the map
13. Arrangements of tables and chairs in an exam hall done by 10 workers in 6 hours. How many workers will be required to do the same work in 4 hours

14. There are 200 students in a primary school. They need 50L of drinking water per day. If 50 of them are reduced, how many litres of water are needed per day?

Answers:

1. $\frac{x}{y} = k$

2. $xy = k$

3. Yes

4. ₹720

5. 24

6. 100

7. 250m

8. 408

9. 240km

10. 5 pens

11. 2250

12. 4cm

13. 15

14. 66.6L
