

**Class: VIII Subject- MATHEMATICS**

**Assignment- CHAPTER- 4:- DIRECT AND INVERSE VARIATION**

1. If ‘x’ and ‘y’ are directly proportional, find the values of x1,  x2, and y1  in the table given below:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| x | 3 | x1 | x2 | 10 |
| y | 72 | 120 | 192 | y2 |

1. The cost of 15 metres of cloth is Rs. 981. What length of this cloth can be purchased for Rs. 1308?
2. A car is travelling at the average speed of 50 km/hr. How much distance would it travel in 1 hour 12 minutes?
3. Reenu types 540 words during half an hour. How many words would she type in 8 minutes?
4. If ‘x’ and ‘y’ are inversely proportional, find the values of x1,  x2, y1 and y2  in the table given below:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| x | 8 | x1 | 16 | x2 | 80 |
| y | y1 | 4 | 5 | 2 | y2 |

1. 6 cows can graze a field in 28 days. How long would 14 cows take to graze the same field?
2. 7 taps of the same size fill a tank in 1 hour and 36 minutes. How long will 8 taps of the same size take to fill the tank?
3. A garrison of 900 men had provision for 42 days. However, a reinforcement of 500 men arrived. For how many days will the food last now?
4. In a hostel, 75 students had food provision food 24 days. If 15 students leave the hostel, for how many days would the food provision last?

**10**. If x and y vary inversely and x = 15 when y = 6, find y when x = 9.