Worksheet 2 – Inverse Proportion

1. Thirty five trucks are needed to transport large bags of grain from a warehouse to a pasta factory. Each truck carries eight bags of grain. However, the truck drivers objected saying that the load was too heavy, and carried only 7 bags per truck. How many trucks are needed to transport the grain now?

2. It takes four men 6 hours to repair a road. How long will it take eight men to do the same job if they work at the same rate?

3. Albert takes 75 minutes to drive home at 80 km/hr. How long will it take to drive home at 100 km/hr?

4. A farmer has enough grain to feed 50 cows for 10 days. The farmer sells ten cows. For how many days will the grain last now?

5. A book has 300 pages, with 28 lines printed in every page. If the book must have only 280 pages, how many lines should be printed per page?

6. Four people live in a particular house. The amount of groceries in this house are enough to last for 30 days. If a guest comes to stays in the house, for how many days will the groceries last now?

7. In an army camp, there is enough food to feed 1200 soldiers for 8 weeks. Three hundred more soldiers join the camp. For how many weeks will the food last now?

8. The time taken for the water in a kettle to boil is inversely proportional to the power of the kettle. When the power of the kettle is 2000 Watts, the water in the full kettle takes 240 seconds to boil. Calculate the time it takes to boil the same amount of water when the power of the kettle is reduced to 1500 Watts.

9. If 20 men reap a field in 14 days, in how many days can 35 men reap the same field?

10. A fort has provisions for 300 men for 90 days. 50 men left the fort. How long would the food last at the same rate?

11. Four pipes can fill a tank in 70 minutes. How long will it take to fill the tank with 7 pipes?

12. It takes 4 men ten days to build a brick wall. How many days will it take 5 men?