## EXERCISE 7B

**1. The cost of 3/5 kg of ghee is ₹ 96, find the cost of:**
**(i) one kg ghee.**
**(ii) 5/8 kg ghee.**
**Solution:**

It is given that
Cost of 3/5 kg of ghee = ₹ 96

(i) Cost of 1 kg of ghee = 96 × 5/3 = ₹ 160

(ii) Cost of 5/8 kg of ghee = 160 × 5/8 = ₹ 100

**2. 3 ½ m of cloth costs ₹ 168, find the cost of 4 1/3 m of the same cloth.**
**Solution:**

It is given that
Cost of 3 ½ m of cloth = ₹ 168
So the cost of 1 m of cloth = 168 × 2/7 = ₹ 48
Similarly the cost of 4 1/3 m of cloth = 48 × 13/3 = ₹ 208

**3. A wrist-watch loses 10 sec in every 8 hours. In how much time will it lose 15 sec?**
**Solution:**

It is given that
Time taken by a wrist watch to lose 10 sec = 8 hours
So the time taken by a wrist watch to lose 1 sec = 8/10 hours
Similarly the time taken by a wrist watch to lose 15 sec = 8/10 × 15 = 12 hours

**4. In 2 days and 20 hours a watch gains 20 sec. Find, how much time the watch will take to gain 35 sec.**
**Solution:**

We know that
2 days 20 hours = 2 × 24 + 20 = 48 + 20 = 68 hours
Time in which 20 sec are gained = 68 hours
So the time in which 1 sec will be gained = 68/20 hours
Similarly the time in which 35 sec will be gained = 68/20 × 35
By further calculation
= 119 hours
So we get
= 119 ÷ 24 days
= 4 days 23 hours

**5. 50 men mow 32 hectares of land in 3 days. How many days will 15 men take to mow it?**
**Solution:**

Land is similar for both the case.
No. of days taken by 50 men to mow the land = 3 days
No. of days taken by 1 man to mow the land = 3 × 50 days

No. of days taken by 15 men to mow the land = (3 × 50)/ 15 = 10 days

**6. The wages of 10 workers for six days week are ₹ 1,200. What are the one day wages:**
**(i) of one worker?**
**(ii) of 4 workers?**
**Solution:**

It is given that
Wages of 10 workers for 6 days a week = ₹ 1200
Wages of 10 workers per day = 1200/6 = ₹ 200
Wages of 1 worker per day = 200/10 = ₹ 20
Wages of 4 workers per day = 4 × 20 = ₹ 80

**7. If 32 apples weigh 2 kg 800 g, how many apples will there be in a box, containing 35 kg of apples?**
**Solution:**

Weight of apples in a box = 35 kg
If the weight of apples is 2 kg 800 g (2.8 kg) then the number of apples = 32
No. of apples if the weight is 1 kg = 32/2.800
No. of apples if the weight is 35 kg = (32 × 35)/ 2.800
Multiplying both numerator and denominator by 1000
= (32 × 35 × 1000)/ 2800
= 400

**8. A truck uses 20 litres of diesel for 240 km. How many litres will be needed for 1200 km?**
**Solution:**

Diesel needed for 240 km = 20 litres
Diesel needed for 1 km = 20/ 240 litres
Diesel needed for 1200 km = 20/240 × 1200 = 100 litres

**9. A garrison of 1200 men has provisions for 15 days. How long will the provisions last if the garrison be increased by 600 men?**
**Solution:**

No. of days 1200 men has provisions = 15 days
No. of days 1 man has provisions = 15 × 1200 days
No. of days 1200 + 600 = 1800 men has provisions = (15 × 1200)/ 1800 = 10 days

**10. A camp has provisions for 60 pupils for 18 days. In how many days, the same provisions will finish off if the strength of the camp is increased to 72 pupils?**
**Solution:**

No. of days 60 pupil have provisions = 18 days
No. of days 1 pupil have provision = 18 × 60 days
No. of days 72 pupils have provision = (18 × 60)/ 72 = 15 days