

**EXERCISE 7B**

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

It is given that

Cost of  $\frac{3}{5}$  kg of ghee = ₹ 96(i) Cost of 1 kg of ghee =  $96 \times \frac{5}{3} = ₹ 160$ (ii) Cost of  $\frac{5}{8}$  kg of ghee =  $160 \times \frac{5}{8} = ₹ 100$ **2.  $3\frac{1}{2}$  m of cloth costs ₹ 168, find the cost of  $4\frac{1}{3}$  m of the same cloth.****Solution:**

It is given that

Cost of  $3\frac{1}{2}$  m of cloth = ₹ 168So the cost of 1 m of cloth =  $168 \times \frac{2}{7} = ₹ 48$ Similarly the cost of  $4\frac{1}{3}$  m of cloth =  $48 \times \frac{13}{3} = ₹ 208$ **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 =  $\frac{8}{10}$  hoursSimilarly the time taken by a wrist watch to lose 15 sec =  $\frac{8}{10} \times 15 = 12$  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 =  $2 \times 24 + 20 = 48 + 20 = 68$  hours

Time in which 20 sec are gained = 68 hours

So the time in which 1 sec will be gained =  $\frac{68}{20}$  hoursSimilarly the time in which 35 sec will be gained =  $\frac{68}{20} \times 35$ 

By further calculation

= 119 hours

So we get

=  $119 \div 24$  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 =  $3 \times 50$  days

No. of days taken by 15 men to mow the land =  $(3 \times 50) / 15 = 10$  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 =  $4 \times 20 = ₹ 80$

**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 =  $(32 \times 35) / 2.800$

Multiplying both numerator and denominator by 1000

=  $(32 \times 35 \times 1000) / 2800$

= 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 =  $20/240 \times 1200 = 100$  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 =  $15 \times 1200$  days

No. of days  $1200 + 600 = 1800$  men has provisions =  $(15 \times 1200) / 1800 = 10$  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 =  $18 \times 60$  days

No. of days 72 pupils have provision =  $(18 \times 60) / 72 = 15$  days