

**EXERCISE 7A**

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**1. Weight of 8 identical articles is 4.8 kg. What is the weight of 11 such articles?****Solution:**

It is given that

Weight of 8 identical articles = 4.8 kg

So the weight of 1 article =  $4.8/8$  kgHere the weight of 11 such articles =  $4.8/8 \times 11$ 

We get

$$= 0.6 \times 11$$

$$= 6.6 \text{ kg}$$

**2. 6 books weigh 1.260 kg. How many books will weigh 3.150 kg?****Solution:**

It is given that

Weight of 6 books = 1.260 kg or 1 kg 260 g

Number of books = 6

So the number of books in 1 kg =  $6/1.260$ Number of books in 3.150 kg =  $(6 \times 3.150)/1.260$ 

Multiplying 1000 to numerator and denominator

$$= (6 \times 3150)/1260$$

$$= 3150/210$$

$$= 15 \text{ books}$$

**3. 8 men complete a work in 6 hours. In how many hours will 12 men complete the same work?****Solution:**

It is given that

Time taken by 8 men to complete a work = 6 hours

So the time taken by 1 man to complete the work =  $6 \times 8$  hoursTime taken by 12 men to complete the work =  $(6 \times 8)/12 = 4$  hours**4. If a 25 cm long candle burns for 45 minutes, how long will another candle of the same material and same thickness but 5 cm longer than the previous one burn?****Solution:**

Time taken by a 25 cm long candle to burn = 45 minutes

Time taken by a 1 cm long candle to burn =  $45/25$  minutesSo the time taken by a  $25 + 5 = 30$  cm long candle to burn =  $(45 \times 30)/25 = 54$  minutes**5. A typist takes 80 minutes to type 24 pages. How long will he take to type 87 pages?****Solution:**

Time taken by a typist to type 24 pages = 80 minutes

Time taken by a typist to type 1 page =  $80/24$  minutesTime taken by a typist to type 87 pages =  $(80 \times 87)/24 = 290$  minutes**6. ₹750 support a person for 15 days. For how many days will ₹ 2,500 support the same person?**

**Solution:**

It is given that

₹ 750 can support a family for 15 days

So ₹ 1 will support a family =  $15/750$  days

Similarly ₹ 2500 will support a family =  $15/750 \times 2500 = 50$  days

**7. 400 men have provisions for 23 weeks. They are joined by 60 men. How long will the provisions last?**

**Solution:**

It is given that

No. of weeks 400 men have provisions = 23 weeks

No. of weeks 1 man have provisions =  $23 \times 400$  weeks

So the no. of weeks  $400 + 60 = 460$  men have provisions =  $(23 \times 400)/460 = 20$  weeks

**8. 200 men have provisions for 30 days. If 50 men have left, for how many days the same provisions would last for the remaining men?**

**Solution:**

No. of days 200 men have provisions = 30 days

No. of days 1 man have provisions =  $30 \times 200$  days

So the no. of days  $200 - 50 = 150$  men have provisions =  $(30 \times 200)/150 = 40$  days

**9. 8 men can finish a certain amount of provisions in 40 days. If 2 more men join them, find for how many days will the same amount of provisions be sufficient.**

**Solution:**

No. of days 8 men can finish a certain amount of provision = 40 days

No. of days 1 man can finish provision =  $40 \times 8$  days

So the no. of days  $8 + 2 = 10$  men finish a provision =  $(40 \times 8)/10 = 32$  days

**10. If the interest on ₹ 200 be ₹ 25 in a certain time, what will be the interest on ₹ 750 for the same time?**

**Solution:**

It is given that

Interest on ₹ 200 = ₹ 25

Interest on ₹ 1 = ₹  $25/200$

So the interest on ₹ 750 =  $(25 \times 750)/200 = 750/8 = ₹ 93.75$

**11. If 3 dozen eggs cost ₹ 90, find the cost of 3 scores of eggs. [1 score = 20]**

**Solution:**

We know that

3 dozen =  $3 \times 12 = 36$  eggs

3 scores =  $3 \times 20 = 60$

Cost of 36 eggs = ₹ 90

Cost of 1 egg = ₹  $90/36$

Cost of 60 eggs =  $(90 \times 60)/36 = ₹ 150$

**12. If the fare for 48 km is ₹ 288, what will be the fare for 36 km?**

**Solution:**

It is given that

Fare for 48 km = ₹ 288

So the fare for 1 km =  $(288 \times 36) / 48 = ₹ 216$

**13. What will be the cost of 3.20 kg of an item, if 3 kg of it costs ₹ 360?**

**Solution:**

It is given that

Cost of 3 kg of an item = ₹ 360

Cost of 1 kg of an item = ₹  $360/3$

So the cost of 3.20 kg of an item =  $(360 \times 3.20) / 3 = ₹ 384$

**14. If 9 lines of a print, in a column of a book, contain 36 words, how many words will a column of 51 lines contain?**

**Solution:**

No. of words in a 9 lines of a print = 36

No. of word in a 1 line of a print =  $36/9$

No. of words in 51 lines of a print =  $36/9 \times 51 = 204$

**15. 125 students have food sufficient for 18 days. If 25 more students join them, how long will the food last now?**

**What assumption have you made to come to your answer?**

**Solution:**

No. of pupils in the beginning = 125

No. of pupils joined = 25

So the total no. of pupils =  $125 + 25 = 150$

No. of days food is sufficient for 125 pupils = 18 days

No. of days food is sufficient for 1 pupil =  $18 \times 125$  days

No. of days food is sufficient for 150 pupils =  $(18 \times 125) / 150$

We get

=  $(18 \times 5) / 6$

= 15 days