EXERCISE 7A   **PAGE: 88**

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 kg
Here the weight of 11 such articles = 4.8/8 × 11
We get
= 0.6 × 11
= 6.6 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 × 3.150)/ 1.260
Multiplying 1000 to numerator and denominator
= (6 × 3150)/ 1260
= 3150/ 210
= 15 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 × 8 hours
Time taken by 12 men to complete the work = (6 × 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 minutes
So the time taken by a 25 + 5 = 30 cm long candle to burn = (45 × 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 minutes
Time taken by a typist to type 87 pages = (80 × 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
Fare for 48 km = ₹ 288
So the fare for 1 km = (288 × 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 × 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 × 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 × 125 days
No. of days food is sufficient for 150 pupils = (18 × 125)/ 150
We get
= (18 × 5)/ 6
= 15 days