# ©゙" doubtnut 

India's Number 1 Education App

## MATHS

## BOOKS - RS AGGARWAL MATHS

## (HINGLISH)

## UNITARY METHOD

Solved Example

1. If the cost of 9 toys is Rs 333 .find the cost of
2. If 25 metres of cloth costs Rs 1550 .how many metres of it can be for RS 2016?

## D Watch Video Solution

3. If 13 metres of a iron rod weighs 23.4 kg
then what will be the weight of 6 metres of the same rod?

- Watch Video Solution

4. The length of the shadow of a $3 m$ high pole at a certain time the day is 3.6 m . What is the height of another pole whose shadow at that time is $54 m$ long?
A. $35 m$
B. $37 m$
C. $45 m$
D. none of these

Answer: C

## - Watch Video Solution

Example

1. Suppose a car covers a certain distance at a
uniform speed. Then we can say for certain
that more is the speed of the car.less is the
time taken to cover this distance.

Thus speed varies inversly as the time taken to cover a certain distance.
2. Suppose a given mass of a gas is subjected to presure.As the presure increaes .the volume of the gas decreases.

Thus a given mass is subjected to presure varies inversly as its volume.

## D Watch Video Solution

3. If 36 men can finish a piece of work in 35 days.how many days will 15 men take to do it ?
4. A work-force of 420 men with a contractor can finish a certain piece of work in 9 months.

How many extra men must he employ to complete the job in 7 months?

## - Watch Video Solution

5. A garrison of 500 men had provisions for 24 days.However a reinforcement of 300 men arrived.For how many days will the food last now?
6. state true or false. The cost of articles varies directly as the number of articles.
(More aricles ,more cost).(Less articles .less cost).

## D Watch Video Solution

7. Work done is directly proportional to the number of men working on it.

## Watch Video Solution

## Exercise 9 A

1. If 15 oranges रु 110 ,what do 39 Oranges cost ?

## - Watch Video Solution

2. If 8 kg sugar costs रु 260 . how much sugar can be bought for रु 877.50 ?
3. The cost of 37 m of silk is रु 6290.What length of this silk can be purchased for रु 4420?

## D Watch Video Solution

4. A worker is paid रु 1110 for 6 days.If his total
wages during a month are रु 4625 for how many days he work?
5. A car cover a distance of 357 km on 42 litres petrol. How far can it travel on 12 litres of petrol?

## - Watch Video Solution

6. Travelling 900 km by rail costs रु 2520 What
would be the fare for a journey of 360 km
when a person travles by the same class?
7. A train covers a distance of 51 km in 45 minutes .How long will take to cover 221 km ?

## - Watch Video Solution

8. If 22.5 metres of a uniform iron rod weighs
85.5 kg .What will be the length of 22.8 kg of the same rod?
(D) Watch Video Solution
9. IF weight of 6 paper sheets is 162 grams.how many sheets of the same quality of paper would weight 13.5 kg ?

## - Watch Video Solution

10. 1152 bars of soap can be packed in 8 cartoons of the same size.How many such cartoon will be required to pack 3888 bars?

## - Watch Video Solution

11. If the thickness of a pile of 16 cardboards is

44 mm.how many cardboards will be there in a pile which is 71.5 cm thick ?

## - Watch Video Solution

12. At a particular time of a day a 7-m high
flagstaff casts a shadow which is 8.2 m
long.What is the height of the building which casts a shadow 20.5 metres length at the same moment?
13. 15 men can build a 16.25 -m- long wall up to
a certainj height in one day. How many men should be employed to build a wall of the same height but of length 26 metres in one day?

## D Watch Video Solution

14. In a hospital the monthly consumption of milk of 60 patients is 1350 litres .How many
patients can be accomodated in the hospital if
the monthly ration of milk is raised to 1710
litres. Assuming that the quota per head remains the same?

## D Watch Video Solution

15. The extension in an elastic string varies
directly as the weight hung on it. If a weight of

150 g produces an extension of 2.8 cm . What weight would produce an extension of 19.6 cm ?

## Watch Video Solution

## Exercise 9 B

1. If 48 men can dig a trench 14 days.how long will 28 men take to dig a simillar trench ?

## - Watch Video Solution

2. 16 men can reap a field in 30 days .How many men must be engaged to reap the same field in 24 days?
3. 45 cows can graze a field in 13 days. How many cows will graze the same field in 9 days?

## - Watch Video Solution

4. 14 horses can consume a certain quantitiy of corn in 25 days.In how many days would the same quantity be consumed by 40 horses?
5. A girl can finsh a book in 25 days if she reads

18 pages of it every day. How many days will she take to finish it .If she reads 15 pages every day?

## D Watch Video Solution

6. Reeta types 40 words per minute and takes

24 minutes to type a document. Her friend geeta has a typing speed 48 wors per minute.

In how much time will she be able to type the same documents?

## D Watch Video Solution

7. A bus covers distance in 3 hours 20 minutes at an average speed of $45 \mathrm{~km} / \mathrm{h}$. How long will
it take to cover the same distance at a speed of $36 \mathrm{~km} / \mathrm{h}$ ?
8. At the beginning of a month ,a factory has enough materials to make 240 tonnes of steel in a month.If 60 more tonnes of steel is to be made that month.how long will the materilas

## last?

## - Watch Video Solution

9. A constrator employed 210 men to build a house in 60 days. After 12 days.he was joined by 70 more men. In how many days will the
remaining work be finished?

Hint. 210 men can complete the remaning work in 48 days.Find in how many days 280 men can do it.

## - Watch Video Solution

10. A military camp has provisions for 630 men
to last for 25 days. How many men must be transferred to another camp so that the food lasts for 30 days?
11. A group of 120 men had provisions for 200 days. After 5 days, 30 men died due to an epidemic. How long will the remaining food last?

## D Watch Video Solution

12. 1200 soldiers in a fort had enough food for

28 days. After 4 days, some soldiers were transferred to another fort and thus the food
lasted now for 32 more days. How many soldiers left the fort?

## D Watch Video Solution

## Exercise 9 C

1. If 4.5 m of a uniform rod weighs 17.1 kg what is the weight of 12 m of such a rod?
A. 51.2 kg
B. 53 kg

## C. 45.6 kg

D. 56 kg

## Answer: C

## D Watch Video Solution

2. Ina a map 0.8 cm represents $8.8 \mathrm{~km}>$ How much distance will be represented by 80.5 cm ?
A. 805 km
B. 855.5 km

## C. 644 km

D. non of these

## Answer: d

## D Watch Video Solution

3. In a race,Raghu covers 5 m in 20 minutes.how much distance will be cover in 50 minutes?
A. 10.5 km
B. 12 km
C. 12.5 km
D. 13.5 km

## Answer: C

## D Watch Video Solution

4. A garirison of 500 men had provision for 24 days.However a reinforcement of 300 men arrived.The food will last for
A. 18 days
B. 17. $\frac{1}{2}$ days
C. 16 days
D. 15 days

## Answer: c

## D Watch Video Solution

5. If $\frac{4}{5}$ of a water tank is filled in 1 hour, how much time will be required to fill the rest of it?

20 minutes (b) 15 minutes 12 minutes (d) 10

## minutes

A. 20 seconds
B. 15 seconds
C. 12 seconds
D. 10 seconds

Answer: A
( Watch Video Solution
6. If 21 cows eat as much as 15 buffaloes, how many cows will eat as much as 35 buffaloes?

45 (b) 4956 (d) 54
A. 49
B. 56
C. 45
D. non of these

Answer: a

D Watch Video Solution

## 7. A tree 6 m tall casts a shadow of length 4

m.At the same time a flag casts a shadow of length 50 m. Find the length of the pole

A. 50 m

B. 75 m
C. $\frac{33.1}{3} \mathrm{~m}$
D. non of these

Answer: b

- Watch Video Solution

8. 8 men can finish a piece of work in 40 days.

If 2 more men join them, the work will be
computed in 30 days (b) 50 days $37 \frac{1}{2}$ days (d) 25 days
A. 30 days
B. 50 days
C. 25 days
D. $37 \frac{1}{2}$ dayd

Answer: b
9. If 16 men can reap a field in 30 days.in how many days will 20 men reap the same field?
A. 10. $\frac{2}{3}$ days
B. 24 days
C. 25 days
D. $37 . \frac{1}{2}$ days

Answer: b

D Watch Video Solution
10. 10 pipes of the same diameter can fill a
tank in 24 minutes.If 2 pipes gp out of order.how long will the remaining pipe take to
fill the tank?
A. 40 min
B. 45 min
C. 30 min
D. 19. $\frac{1}{5} \mathrm{~min}$

## Answer: c

11. 6 dozen eggs are bought for RS 108,How much will 132 eggs cost?
A. Rs 204
B. Rs 264
C. Rs 184
D. Rs 198

Answer: D

D Watch Video Solution
12. 12 worker take 4 hours to complete a job.How long would it take 15 workers to complete the job?
A. 2 hrs
B. 3.2 hrs
C. 3 . 5 hrs
D. 3 hrs

Answer: B
13. A garrison of 500 men had provisions for

27 days. After 3 days a reinforcement of 300 men arrived. For how many more days will the remaining food last now? 15 b. 16 c. 18 d. $17 \frac{1}{2}$
A. 15 days
B. 16 days
C. 17. $\frac{1}{2}$ days
D. 18 days

## Answer: C

## D Watch Video Solution

14. A rope makes 140 rounds of the circumference of a cylinder.the radius of whose base is 14 cm . How many time can it go round a cylinder with radiud 20 cm ?
A. 28
B. 17
C. 68

## D. 200

## Answer: d

## D Watch Video Solution

15. A worker makes a toy every $\frac{2}{3}$ hour. If he works for $7 \frac{1}{3}$ hours, then how many toys will he make? 12 (b) 1618 (d) 22
A. 22
B. 18
C. 16
D. 12

## Answer: d

## - Watch Video Solution

16. 10 men can finish the construction of a wall
in 8 days.How many men are added to finish
the work in half a day?
A. 80
B. 100
C. 120
D. 0.625

Answer: d

D Watch Video Solution

## Test Paper 9

1. If the cost of 8 toys is Rs 192. What will be te
cost of such 14 toys?
2. A car can cover 270 km in 15 litres of petrol.How many kilometer will it cover in 8 litres of petrol?

- Watch Video Solution

3. If 15 envelope cost Rs 11.25 .what is the cost of such 20 envelopes?

- Watch Video Solution

4. 24 cows can graze a field in 20 days.How many cows can graze it in 15 days?

## D Watch Video Solution

5. 8 men can finish a piece of work in 15
hours.In how many hours can 20 men finish it?

- Watch Video Solution

6. If $\frac{4}{5}$ of a cistern is filled in 1 minute,how much time will be required to fill the empty cistern?

## - Watch Video Solution

7. A bus covers a certain distance in 20 minute
at an average speed of 45 km per hour .How much time will it take to cover the same distance at a speed of 50 km perhour?
8. In a fort,120 men had provisions for 30 days,For how many days is the food sufficient for 100 men?

## D Watch Video Solution

9. In a map, 1 cm represents 8 km .How much distance will be represented by 80.5 cm ?
A. 640 km
B. 642 km

## C. 644 km

D. 648 km

## Answer: C

## - Watch Video Solution

10. If 16 men can reap a field in 30 days.in how many days will 20 men reap the same field?
A. 14 days
B. 25 days

## C. 10days

D. 24days

## Answer: D

## D Watch Video Solution

11. If 21 cows eat as much as 15 buffaloes.how many cows will eat as much as 35 buffaloes?
A. 45
B. 49

## C. 56

D. 54

Answer: b

## D Watch Video Solution

12. 45 cows can graze a field in 12 days.How many cows will graze the same field in 9 days?
A. 60 days
B. $38 . \frac{3}{4}$ days
C. 54 days
D. non of these

## Answer: a

## D Watch Video Solution

13. 6 dozen eggs are bought for $R s 108$. How much will 108 eggs cost?
A. $R s 171$
B. $R s 162$

## C. $R s 153$

D. $R s 180$

Answer: $B$

## D Watch Video Solution

14. Fill in the blanks

If 42 men can dig a trench in 14 days,then 1 man can dig it in .....days.

If 15 oranges cost Rs 60 ,then 12 oranges cost Rs

If 10 metres of a uniform rod weighs 18 kg .then the weight of 6 metres of the rod is....kg.

If 12 workers finish a piece of work in 4 hours.

Then 15 workers will finish it in ....hrs....min.

## D Watch Video Solution

15. If 10 pipes of the same diameter can fill a
tank in 24 minutes.then 8 pipes would fill in 19 $\min 20 \mathrm{sec}$.

## D Watch Video Solution

16. If 8 men can finish a piece of work in 40 days.then 10 men can finish it in 32 days.

## - Watch Video Solution

17. A tree 6 m tall casts a shadow of length 4
m.At the same time a flag casts a shadow of
length 50 m .Find the length of the pole
18. If a worker takes $\frac{2}{3}$ hour to make a toy.then he will make 12 toys in 8 hours.
(D) Watch Video Solution
