

Numerical Ability Question & Answers

1) In each of the following questions a number series is given with one term missing. Choose the correct alternative that will continue the same pattern and fill in the blank spaces.

2, 7, 14, 23, ?, 47

A. 31

B. 28

C. 34

D. 38

Answer : C.

The given sequence is +5, +7, +9, ——

ie. $2 + 5 = 7$, $7 + 7 = 14$, $14 + 9 = 23$

Missing Number = $23 + 11 = 34$.

2) 4, 6, 12, 14, 28, 30, ?

A. 32

B. 64

C. 62

D. 60

Answer : D.

The given sequence is a combination of two series 4, 12, 28, and 6, 14, 30,
The pattern is +8, +16, +32. So, the missing number = $(28 + 32) = 60$

3) 4, 9, 13, 22, 35, ?

A. 57

B. 70

C. 63

D. 75

Answer : A.

Sum of two consecutive numbers of the series gives the next number.

4) 11, 13, 17, 19, 23, 29, 31, 37, 41, ?

A. 43

B. 47

C. 51

D. 53

Answer : A.

The series consists of prime numbers.

5) 15, 31, 63, 127, 255, ?

A. 513

B. 511

C. 523

D. 517

Answer : B.

Each number is double of the preceding one plus 1.

6) Walking at the rate of 4kmph a man cover certain distance in 2hr 45 min.
Running at a speed of 16.5 kmph the man will cover the same distance in.

A. 12 min

B. 25 min

C. 40 min

D. 48 min

Answer : C.

Distance = Speed * time

$$4 * 11/4 = 11\text{km}$$

New Speed = 16.5 kmph

Therefore time = $D/S = 11/16.5 = 40\text{min}$

7) A train covers a distance in 50 min, if it runs at a speed of 48kmph on an average. The speed at which the train must run to reduce the time of journey to 40min will be <https://www.freshersnow.com/previous-year-question-papers/>

A. 45 min

B. 60 min

C. 55 min

D. 70 min

Answer : B.

$$\text{Time} = 50/60 \text{ hr} = 5/6 \text{ hr}$$

$$\text{Speed} = 48 \text{ mph}$$

$$\text{distance} = S * T = 48 * 5/6 = 40 \text{ km}$$

$$\text{time} = 40/60 \text{ hr} = 2/3 \text{ hr}$$

$$\text{New speed} = 40 * 3/2 \text{ kmph} = 60 \text{ kmph}$$

8) Two persons starting from the same place walk at a rate of 5kmph and 5.5kmph respectively. What time will they take to be 8.5km apart, if they walk in the same direction?

A. 17 hrs

B. 22 hrs

C. 25 hrs

D. 12 hrs

Answer : A.

The relative speed of the boys = $5.5\text{kmph} - 5\text{kmph}$
= 0.5 kmph

Distance between them is 8.5 km

Time = $8.5\text{km} / 0.5\text{ kmph} = 17\text{ hrs}$

9) Excluding stoppages, the speed of a bus is 54 kmph and including stoppages, it is 45 kmph . For how many minutes does the bus stop per hour?

- A. 8 min
- B. 5 min
- C. 10 min
- D. 14 min

Answer : C.

Due to stoppages, it covers 9 km less.

Time taken to cover $9\text{ km} = (9/54 \times 60)\text{ min} = 10\text{ min}$.

10)

A. 9:11

B. 11:9

C. 7:5

D. 5:7

Answer : B.

They cover 110km & 90 km respectively. So, ratio of their speed = $110:90 = 11:9$.

11) A train passes a station platform in 36 seconds and a man standing on the platform in 20 seconds. If the speed of the train is 54 km/hr, what is the length of the platform?

A. 110 cm

B. 120 cm

C. 240 cm

D. 260 cm

Answer : C.

12) A goods train runs at the speed of 72 km/hr and crosses a 250 m long platform in 26 seconds. What is the length of the goods train?

A. 240m

B. 250m

C. 260m

D. 270m

Answer : D.

13) The ratio between the speeds of two trains is 7 : 8. If the second train runs 400 kms in 4 hours, then the speed of the first train is

A. 87.5 km/h

B. 78.0 km/h

C. 65.5 km/h

D. 58.0 km/h

Answer : A.

14) In what time will a train 100 metres long cross an electric pole, if its speed is 144 km/hr

A. 12.5 s

B. 8.5 s

C. 10.5 s

D. 2.5 s

Answer : D.

15) A train 280m long, running with a speed of 63kmhr will pass a pole in

A. 12 s

B. 14 s

C. 16 s

D. 18 s

Answer : C.

16) X can do $\frac{1}{4}$ of a work in 10 days, Y can do 40% of work in 40 days and Z can do $\frac{1}{3}$ of work in 13 days. Who will complete the work first?

A. X

B. Y

C. Z

D. None of the above.

Answer : C.

Whole work will be done by X in $10 \times 4 = 40$ days.

Whole work will be done by Y in $(40 \times 100 / 40) = 100$ days.

Whole work will be done by Z in $(13 \times 3) = 39$ days

Therefore, Z will complete the work first.

17) A can do a piece of work in 7 days of 9 hours each and B alone can do it in 6 days of 7 hours each. How long will they take to do it working together $8 \frac{2}{5}$ hours a day?

A. 3

B. 4

C. 5

D. 6

Answer : A.

A can complete the work in $(7*9) = 63$ days

B can complete the work in $(6*7) = 42$ days

--> A's one hour's work = $1/63$ and B's one hour work = $1/42$.

(A+B)'s one hour work = $1/63+1/42 = 5/126$

Therefore, Both can finish the work in $126/5$ hours.

Number of days of $8 \frac{2}{5}$ hours each = $(126*5/(5*42)) = 3$ days

18) A can do a piece of work in 80 days. He works at it for 10 days & then B alone finishes the remaining work in 42 days. In how much time will A and B, working together, finish the work?

A. 23 days

B. 25 days

C. 30 days

D. 33 days

Answer : C.

Work done by A in 10 days = $10/80 = 1/8$

Remaining work= $(1-(1/8))=7/8$

Now, work will be done by B in 42 days.

Whole work will be done by B in $(42*8/7)=48$ days

Therefore, A's one day's work= $1/80$

B's one day's work= $1/48$

(A+B)'s one day's work= $1/80+1/48=8/240=1/30$

Hence, both will finish the work in 30 days.

19) A and B are working on an assignment. A takes 6 hours to type 32 pages on a computer, while B takes 5 hours to type 40 pages. How much time will they take, working together on two different computers to type an assignment of 110 pages?

A. 5 hours

B. 6 hours

C. 7 hours

D. 8 hours

Answer : D.

Number of pages typed by A in one hour= $32/6=16/3$

Number of pages typed by B in one hour= $40/5=8$

Number of pages typed by both in one hour= $((16/3)+8)=40/3$

Time taken by both to type 110 pages= $110*3/40=8$ hours.

20) A can finish a work in 18 days and B can do the same work in half the time taken by A. Then, working together, what part of the same work they can finish in a day?

A. $1/5$

B. $1/6$

C. $1/7$

D. $1/8$

Answer : B.

Given that B alone can complete the same work in days = half the time taken by A
= 9days

A's one day work = $1/18$

B's one day work = $1/9$

(A+B)'s one day work = $1/18 + 1/9 = 1/6$