Time Speed and Distance

1) Vimal completes the first part of his journey at 30kmph and the next at 60kmph, covering the entire journey at an average speed of 40 kmph. What is the ratio of the distance that he covered at 30kmph to that he covered at 60kmph?
A) 2 : 1 B) 1 : 5 C) 3 : 1
D) 3 : 5 E) None of these

2) Suresh takes 7 hours 40 minutes in walking to a certain place and riding back. If he walks on both ways he will lose one hour. The time he would take to ride both ways is?
A) 5 hours 20 minutes B) 7 hours 40 minutes
C) 6 hours 20 minutes D) 6 hours 40 minutes
E) None of these

3) Anil completed his journey in 10 hours. He travels first half of the journey at the rate of 22 kmph and second half at the rate of 18 kmph. Find the total journey in km.
A) 145 km B) 198 km C) 220 km
D) 180 km E) None of these

4)Two cars start from a place with a speed of 40 kmph at an interval of 10 minutes. What is the speed of a man coming from the opposite direction towards the place if he meets the cars at an interval of 8 minutes?
A) 10 kmph B) 13 kmph C) 14 kmph
D) 16 kmph E) None of these

5) Waking 3/4 of his normal speed, Ravi was 18 minutes late in reaching his office. The usual time took to cover the distance between his home and office was:
A) 36 minutes B) 24 minutes C) 42 minutes
D) 54 minutes E) None of these

6) Mr. Ravi completes a certain journey by a car. If he covered 40% of the distance at the speed of 20kmph, 50% of the distance at 25 kmph and the remaining of the distance at 10 kmph, then what will be the speed?
A) 15 kmph B) 20 kmph C) 18 kmph
D) 14 kmph E) None of these

7) Ajay walked at 10 kmph for certain part of the journey and then he took an auto for the remaining part of the journey travelling at 30 kmph. If he took 10 hours for the entire journey, what part of journey did he traveled by auto if the average speed of the entire journey be 18 kmph?
A) 132 km B) 145 km C) 128 km
D) 120 km E) None of these

8) Rani started walking to the station half a km from her home at 1 kmph to catch the train in time. After 6 minutes she realized that she had forgotten her purse at home and returned with increased, but constant speed to get it succeeded in catching the train. Find her latter speed in kmph.
A) 1.5 kmph B) 1.2 kmph C) 2.2 kmph
D) 3.5 kmph E) None of these

9) Two Rabbits started running towards each other, one from A to B and another from B to A. They cross each other after 1.2 hours and the first Rabbit reaches B, 1 hour before the second rabbit reaches A. If the distance between A and B is 60 km, what is the speed of the slower rabbit?
A) 10 kmph B) 15 kmph C) 25 kmph
D) 18 kmph E) 20 kmph

10) Walking at 3/2 of his normal speed Sehwag takes 40 minutes less than the usual time. What is the new time taken by Sehwag?
A) 6 hours B) 5 hours C) 4 hours
D) 8 hour E) 2 hours

11) A train overtakes two persons who are walking at the rate of 8 kmph and 12 kmph in the same direction in which the train is going, and passes them completely in 9 and 10 seconds respectively. What is the length of the train?
A) 200 m B) 500 m C) 100 m
D) 300 m E) None of these

12) Two trains A and B start from Delhi and Chennai towards Chennai and Delhi respectively. After passing each other they take 19 hours 30 minutes and 8 hours 40 minutes to reach Chennai and Delhi respectively. If the train from Delhi is moving at 80 km/hr then find the speed of the train from Chennai?
A) 110 kmph B) 100 kmph C) 90 kmph
D) 120 kmph E) None of these

13) From Stations P and Q, two trains start moving towards each other at the speeds of 120 kmph and 80 kmph respectively. When the two trains meet each other, it is found that one train has covered 80 km more than that of another train. Find the distance between the stations P and Q?
A) 145 km B) 400 km C) 200 km
D) 180 km E) None of these

14) Two trains leave Chennai for Delhi at 9 pm and 9:45 pm respectively and travel at 80 kmph and 120 kmph respectively. How many km from Chennai, will the two trains meet?
A) 180 km B) 130 km C) 140 km
D) 160 km E) None of these

15) The distance between two stations A and B is 280 km. One train at a speed of 80 kmph leaves station A at 6:00 pm towards station B. Another train at a speed of 120 kmph leaves station B at 7:00 pm towards station A. Then at what time both trains meet?
A) 10:00 pm B) 9:00 pm C) 11:00 pm
D) 8:00 pm E) None of these

16) The distance between two stations A and B is 280 km. One train at a speed of 80 kmph leaves station A at 7:00 pm towards station B. Another train at a speed of 120 kmph leaves station B at 6:00 pm towards station A. Then at what time both trains meet?
A) 6:50 pm B) 7:48 pm C) 10:40 pm
D) 9:20 pm E) None of these

17) The distance between two stations P and Q is 250 km. A train leaves P towards Q at 80 kmph. After half an hour another train leaves Q towards P at 120 kmph. Find

the distance of the point where the two trains meet, from P.
A) 132 km B) 145 km C) 128 km
D) 124 km E) None of these

18) The distance between two stations P and Q is 240 km A train starts from P towards Q and another train from Q to P at the same time and they meet after 8 hours. The train travel traveling from P to Q is slower by 6 kmph compared to another train from B to A, then find the speed of the slower train?
A) 12 kmph B) 15 kmph C) 20 kmph
D) 13 kmph E) None of these

19) A train covers the distance between P and Q in 4 hours. If the speed is reduced by 4 kmph, then the same distance is covered in 5 hours. Find the speed of the train in Kmph?
A) 10 kmph B) 15 kmph C) 25 kmph
D) 18 kmph E) 20 kmph

20) A train covers the distance between P and Q in 5 hours. If the speed is reduced by 5 kmph, then the same distance is covered in 6 hours. Find the reduced speed and distance between P and Q in km?
A) 10 kmph; 100 km B) 15 kmph; 120 km
C) 30 kmph; 150 km D) 18 kmph; 120 km
E) 25 kmph; 150 km

21) The distance between two towns A and B is 545 km. A train starts from town A at 8 A.M. and travels towards town B at 80 km/hr. Another train starts from town B at 9 : 30 A.M. and travels towards town A at 90 km/hr. At what time will they meet each other?
A) 11:30 AM B) 12:30 PM C) 12:00 Noon
D) 1:00 PM E) 11:00 AM

22) A bus can travel 560 km in 8 hours. The ratio of speed to train to that of car is 13 : 8. If the speed of bus is 7/8 of the speed of car, find in how much time train can cover 520 km distance.
A) 3 hours B) 4 hours C) 6 hours
D) 5 hours E) 2 hours

23) A person has to travel from point A to point B in car in a scheduled time at uniform speed. Due to some problem in car engine, the speed of car has to be decreased by 1/5th of the original speed after covering 30 km. With this speed he reaches point B 45 minutes late than the scheduled time. Had the engine be malfunctioned after 48 km, he would have reached late by only 36 minutes. Find the distance between points A and B.
A) 120 km B) 80 km C) 100 km
D) 150 km E) 70 km

24) Towns A and B are 225 km apart. Two cars P and Q travel from towards each other from towns A and B respectively and meet after 3 hours. If the speed of P be 1/2 of its original speed and Q be 2/3 of its original speed, they would have met after 5 hours. Find the speed of the faster car.
A) 50 km/hr B) 40 km/hr C) 45 km/hr
D) 30 km/hr E) 60 km/hr

25) From point A, Priya and Bhavna start cycling towards point B which is 60 km away from A. The speed of Priya is 10 km/hr more than the speed of Bhavna. After reaching point B, Priya returns towards point A and meets Bhavna 12 km away from point B. Find the speed of Bhavna.
A) 40 km/hr B) 15 km/hr C) 30 km/hr
D) 20 km/hr E) 45 km/hr

26) A train crosses 2 men running in the same direction at speeds 5 km/hr and 8 km/hr in 12 seconds and 15 seconds respectively. Find the speed of the train.
A) 30 km/hr B) 24 km/hr C) 25 km/hr
D) 35 km/hr E) 20 km/hr

27) A train which is travelling at 80 km/hr meets another train travelling in same direction and then leaves it 150 m behind in next 20 seconds. Find the speed of the second train.
A) 72 km/hr B) 53 km/hr C) 64 km/hr
D) 59 km/hr E) 65 km/hr

28) In a 500 m race C can beat B by 30 m, and in a 400 m race B can beat C by 20 m. Then in 200 m race A will beat C by how much distance (in m)?
A) 58.2 m B) 68.4 m C) 63.5 m
D) 72.8 m E) 55.2 m

29) 2 towns A and B are 300 km apart. 2 trains start travelling from town A towards town B such that the second train leaves 8 hours late than the first one. They both arrive at town B simultaneously. If the speed of the faster train is 10 km/hr more than the speed of the slower train, find the time taken by the slower train to complete the journey.
A) 25 hours B) 22 hours C) 14 hours
D) 18 hours E) cannot be determined

30) A man leaves from point A at 4 AM and reaches point B at 6 AM. Another man leaves from point B at 5 AM and reaches point A at 8 AM. Find the time when they meet.
A) 6:20 AM B) 6:15 AM C) 5:45 AM
D) 5:36 AM E) 5:30 AM

Directions(31-35) : Study the following pie chart and bar chart carefully and answer the questions given beside.

A person covers a total distance of 3000 km in 6 days, by bus, by Ola, and by Uber. Study the pie chart and bar graph to answer these questions.

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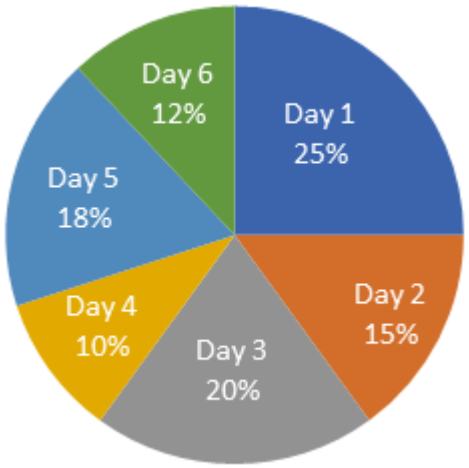
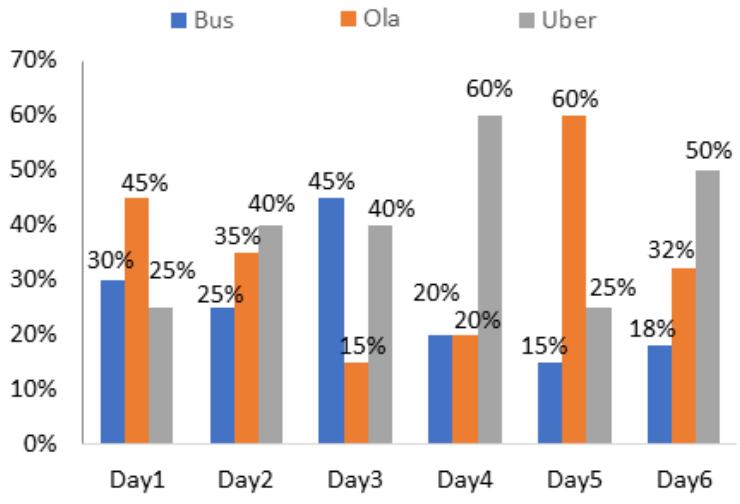


The percentage of distance covered by each mode on each day.



The percentage of total distance travelled in 6 different days

31) What is the total distance covered by Bus?
A)814.9 km B)812.3 km C)813.3 km
D)821.23 km E)None of these

32) If everywhere Ola maintains an average speed of 40 km per hour then what is the total time (In hour) in six days spent on Ola? (Approximately)
A)25 hours B)26 hours C)27 hours
D)28 hours E)28.5 hours

33) The distance travelled by Ola is approximately how much percentage of the distance travelled by Uber? (Round off two decimal)
A)97.21% B)102.32% C)98.34%
D)99.91% E)106.29%

34) Find the respective ratio of the distance travelled by Bus, Ola, and Uber.
A)2711 : 3614 : 3675 B)8133 : 10837 : 11020
C)2713 : 3612 : 3675 D)2717 : 3614 : 3681
E)None of these

35) Suppose, Instead of Bus, the person uses Ola and the speed of Ola is 25% more than the speed of bus then approximately how many hours the person would save? (The average speed of bus is 30 km per hour)
A)6.8 hours B)7.2 hours C)4.6 hours
D)5.4 hours E)4.8 hours

Q.No	Ans	Q.No.	Ans	Q.No.	Ans	Q.No.	Ans
1	C	11	C	21	C	31	C
2	D	12	D	22	B	32	C
3	B	13	B	23	A	33	C
4	A	14	A	24	C	34	A
5	D	15	D	25	D	35	D
6	B	16	B	26	E		
7	D	17	D	27	B		
8	A	18	A	28	B		
9	E	19	E	29	E		
10	E	20	E	30	D		