Time Speed and Distance

1) While covering the distance of 540 km, if the speed of Car is increased by 3 kmph then it takes 2 hours less to cover the same distance then find the new speed of the car?

a) 30 kmph

b) 40 kmph

c) 50 kmph

d) None of these

2) A man walks with the speed of 7 kmph then he reaches office 2 minutes before the actual time but if he travels with 5 kmph then he reaches 2 minutes late then what is the actual time to reach office?

a) 9 mins

b) 12 mins

c) 10 mins

d) 8 mins

3) If a cycle can cover 75 kms in 15 hours while a bike can cover 80 km in 5 hours then find their average speed?

a) 7 kmph

b) 7.75 kmph

c) 6.65 kmph

d) None of these

4) If the speed of bus and car is in the ratio of 1 : 4 and time taken by bus was 6 hours more than car. The distance travelled by them was 80 km each then find the speed of bus?

a) 5 kmph

b) 8 kmph

c) 10 kmph

d) 12 kmph

5) If the ratio of time taken by Ajay and Vijay is 3 : 2 and the distance travelled by Ajay was five time to that of Vijay then find the ratio of their speeds?

a) 3 : 10

b) 1 : 30

c) 3 : 13

d) 10 : 3

6) If a car covers a distance of 120 kms with (S) speed in (T) speed if the same car covers thrice the distance in (T - 4) time with six times the initial speed then find the value of time (T)?

a) 8 hours

b) 6 hours

c) 4 hours

d) 20 hours

7) If the ratio between the time taken by Karan to Ayush's car is 4 : 1 but the distance covered by Ayush was 250% to that of Karan then find the speed ratio of Ayush to Karan?

a) 3 : 10

b) 10 : 3

c) 10 : 1

d) 1 : 10

8) If the speed of Truck is 30% less than that of Bus and their average speed is 35 kmph then find the speed of Truck? Given that both travelled same distance.

a) 59.5 kmph

b) 60 kmph

c) 31.5 kmph

d) 25. 7 kmph

9) If the speed ratio of P, Q and R while covering the same distance is 5 : 2 : 1 then find the ratio of time taken by them?

a) 2 : 15 : 1

b) 2 : 5 : 1

c) 2 : 1 : 10

d) 2 : 5 : 10

10) If the time ratio of Arnab, kamal and Raju is 2 : 5 : 4 then find the speed ratio to cover the distance of 4 : 3 : 7 respectively?

a) 2 : 1 : 5

b) 40 : 12 : 35

c) 10 : 12 : 31

d) 21 : 10 : 35

11) If Gopal walks at the speed of 10 kmph instead of 7 kmph then he must have travelled 30 kms more in the same time then find the distance travelled by Gopal with the speed of 7 kmph?

a) 50 kms

b) 60 kms

c) 70 kms

d) 80 kms

12) While covering the distance of 540 kms, Car A takes 6 hours more than Car B and the ratio of their speed is 3 : 5 then find speed of Car B?

a) 80 kmph

b) 60 kmph

c) 50 kmph

d) 70 kmph

13) If the time taken by Train is 250% of the time taken by Truck and travelled with 6 kmph less to that of Truck to cover the distance of 360 kms then find the time taken by the Truck?

a) 14 hours

b) 20 hours

c) 28 hours

d) 24 hours

14) If the ratio of speed of Ajit and Barkha is 2 : 3 and the time taken by Barkha is 6 minutes less than Ajit to complete the distance of 18 kms then find the speed of Ajit?

a) 30 kmph

b) 45 kmph

c) 60 kmph

d) 50 kmph

15) If the speed of cycle is decreased by 25 kmph then it takes 5 hours more to cover the distance of 880 kms then find the new speed of Cycle?

a) 50 kmph

b) 40 kmph

c) 65 kmph

d) 55 kmph

16) If a ship runs with 80% of its initial speed then it takes 10 minutes more to cover the distance of 480 kms then find its initial speed?

a) 240 kmph

b) 480 kmph

c) 720 kmph

d) 360 kmph

17) If the actual time taken by Tanu is 2 2/3 times to that of Manu to cover the distance of 120 km then find the speed of Manu?

a) 20 kmph

b) 40 kmph

c) 50 kmph

d) 30 kmph

18) Naval starts walking with the speed of 3 kmph for 3.5 hours and then 5.5 kmph for 3 hours then find the average speed of Naval during the whole journey?

a) 3.5 kmph

b) 7.15 kmph

c) 4.15 kmph

d) 6. 35 kmph

19) If the speed of bus is 45 kmph and its speed is increasing by 10% after each hour then find how much distance it will cover in 3 hours?

a) 140.95 kms

b) 145.95 kms

c) 148.95 kms

d) 150.95 kms

20) If the time taken by A is 50% to that of B who takes twice the time of C to cover the same distance then find their speed ratios respectively?

a) 1 : 2 : 1

b) 2 : 2 : 1

c) 1 : 1 : 2

d) 2 : 1 : 2

21) While covering the distance of 360 kms, Car takes five hours less than bus and the ratio of their speed is 4 : 3 then find speed of Car?

a) 24 kmph

b) 25 kmph

c) 28 kmph

d) 20 kmph

22) If the actual speed of a Car is 45 kmph but due to traffic driver drove his car at 36 kmph and takes 2 hours more to cover whole journey the find the total distance?

a) 360 kms

b) 450 kms

c) 180 kms

d) 330 kms

23) If Sumit travelled with the speed 2/5th of his actual speed then he takes to cover 15 minutes more a distance of 50 kms then find his actual speed?

a) 300 kmph

b) 100 kmph

c) 280 kmph

d) 350 kmph

24) If the distance covered by Priya is thrice to that of Tarun and their speed ratio is 2 : 5 then find their time ratio?

a) 3 : 15

b) 2 : 15

c) 15 : 2

d) 15 : 7

25) Two bikes running with the speed of 10 kmph and 12 kmph towards each other then find after how many hours they will meet when covering the distance of 396 kmph?

a) 10 hours

b) 18 hours

c) 16 hours

d) 17 hours

26) If the actual speed of Truck is 36 kmph but due to overloading its speed fall by 9 kmph due to which truck takes 2 hours more then find the distance covered in overloading case?

a) 256 kms

b) 216 kms

c) 108 kms

d) 290 km

27) If the speed of car is decreased by 2 kmph then it takes 2 hours more to cover the distance of 120 kms then what will be the new speed of car?

a) 8 kmph

b) 12 kmph

c) 10 kmph

d) 15 kmph

28) A train having speed 20% more than bus while covering the distance of 120 kms each train takes 30 minutes less than bus then find the speed of bus?

a) 20 kmph

b) 40 kmph

c) 60 kmph

d) 50 kmph

29) If the time taken by Train and Truck to cover 80% of Distance and 140% of distance is same then find the ratio of speed of Train to Truck?

a) 7 : 4

b) 4 : 7

c) 3 : 2

d) 2 : 3

30) If the new speed of car is $6/7^{th}$ of itself then it takes 3 hours more to cover 270 kms then find the actual speed?

a) 18 kmph

b) 15 kmph

c) 21 kmph

d) 20 kmph

31) Arjun drive his car at 20 kmph then he reaches his office 5 minutes earlier and if he drive his car with 16 kmph then he reaches his office 5 minutes late then find at actual time to reach office?

a) 15 minutes

b) 35 minutes

c) 40 minutes

d) 45 minutes

32) If the speed of Car is decreased by 37.5% then it takes 6 hours more to cover a distance of 180 kms them find its initial Speed?

a) 12 kmph

b) 15 kmph

c) 18 kmph

d) 21 kmph

33) Sumit takes 2 hours less time to cover the distance of 160 kmph when he increases his speed by 4 kmph then find the time taken to cover the distance?

a) 10 hours

b) 12 hours

c) 9 hours

d) 13 hours

34) Rama when increases his speed to 5 kmph took 2 hours less to cover the distance of 120 kmph then find the initial speed of Rama?

a) 10 kmph

b) 18 kmph

c) 15 kmph

d) 16 kmph

35) If the speed of car is five times to that of Bus and takes 16 minutes less than Bus to cover the distance of 60 kms then find the speed of car?

a) 100 kmph

b) 90 kmph

c) 900 kmph

d) 180 kmph

36) Tina wants to cover 150 kms with a certain speed if she reduces her speed by 5 kmph then she takes 5 hours more than before then find her new speed?

a) 10 kmph

b) 12 kmph

c) 15 kmph

d) 20 kmph

37) Ravi who can cover a certain distance in 6 hours travelled with the speed 15 kmph more than Rahul who also travelled the same distance then find the speed of Rahul?

a) 36 kmph

b) 30 kmph

c) Cannot be determined

d) None of these

38) If the speed ratio of Car and Truck is 5 : 1 and the time taken by Truck is 4 hours more to that of car to cover the distance of 120 kms then find the time taken by the truck to cover 96 kms of distance?

a) 4 hours

b) 8 hours

c) 6 hours

d) 12 hours

39) If the speed of car is 62.5% of bus whose speed is 80% of bike to cover the same distance then find their time ratio respectively?

a) 8 : 5 : 4

b) 5 : 8 : 10

c) 5 : 8 : 4

d) 1 : 5 : 7

40) If the time taken by A is 33.3% of C who takes 60% to that of B to cover the same distance then what will be their speed ratios respectively?

a) 1 : 3 : 5

b) 15 : 5 : 3

c) 5 : 1 : 3

d) 15 : 5 : 1

41) If the distance travelled by P is 300% of Q who travelled 400% of R in the same time then find the ratio of their speeds?

a) 2 : 4 : 1

b) 2 : 4 : 1

c) 3 : 4 : 1

d) 12 : 4 : 1

42) If the time(t) taken to cover the distance of 196 kms is 25% to that of speed(S) then find the time taken to cover the same distance with half of the speed?

a) 10 hours

b) 14 hours

c) 12 hours

d) 16 hours

43) If the time(t) taken to cover the distance of 160 kms is 10% to that of speed(S) then find the time taken to cover the same distance with (S - 5) kmph?

a) 5.5 hours

b) 4.5 hours

c) 6.5 hours

d) None of these

44) If the difference between the speed of Train and Truck is 20 kmph to cover the same distance of 150 km and the time taken by truck and Train was 4 hours and 3 hours respectively then find the speed of Train?

a) 80 kmph

b) 40 kmph

c) 20 kmph

d) 30 kmph

45) If the sum of speed of Car and Truck is 40 kmph to cover the same distance of 180 km and the time taken by truck and car was 5 hours and 3 hours respectively then find the speed of Truck?

a) 20 kmph

b) 05 kmph

c) 15 kmph

d) 25 kmph

46) If the speed of Car , Truck and Bus is in the ratio of 3 : 1 : 2 to cover the same distance of 60 kms, bus takes 6 hours then find the speed of Car?

a) 25 kmph

b) 35 kmph

c) 15 kmph

d) 10 kmph

47) If the speed of C, A and B is in the ratio of 4 : 2 : 3 to cover the same distance of 96 kms A takes 6 hours then find the speed of C?

a) 32 kmph

b) 33 kmph

c) 34 kmph

d) 30 kmph

48) If the speed of P is 50% of Q and takes 4 hours more than Q to cover the distance of 120 kms then find the average speed of P and Q?

a) 10 kmph

b) 40 kmph

c) 30 kmph

d) 20 kmph

49) If the time taken by A is 200% of B and travelled with 12 kmph less to that of B to cover the distance of 240 kms then find the speed of A?

a) 16 kmph

b) 10 kmph

c) 12 kmph

d) 15 kmph

50) If the time taken by A is 2 hours less than B while travelling the same distance of 120 kms then find the speed of A if speed of B is 10 kmph?

a) 12 kmph

b) 10 kmph

c) 15 kmph

d) 11 kmph

ANSWERS

1) Answer: A

Solution: According to the question,

Let initial speed = S kmph and time taken to cover the given distance = T

First case:

S = 540/T …….(1)

Second case:

S + 3 = 540/T - 2 …….(2)

Solving eq (1) and eq (2)

We get,

Speed = 27 kmph

New speed = 27 + 3 = 30 kmph

2) Answer: B

According to the question,

	Initial	New
Speed	7	5
Time	5x	7x

Difference = 2x

2x = 4 minutes

x = 2 minutes

Initial time = 10 minutes

New time = 14 minutes

Actual time = 10 + 2 = 12 minutes

3) Answer: B

Solution:

According to the condition,

Average speed = (Total distance)/(Total Time)

Average speed = (75 + 80)/(15 + 5) = 7.75 kmph.

Average speed = 7.75 kmph

4) Answer: C

According to the question,

When distance is same; Speed α 1/Time

$S_B : S_C = 1 : 4$…….(1)

Time taken ratio = 4x : 1x ……..(2)

Difference = 3x

Actual difference = 6 hours

3x = 6 hours

4x = 8 hours

Speed of Bus = 80/8 = 10 kmph

5) Answer: D

Solution:

We know that

Speed =Distance/Time …….(1)

Let S_A and S_V be the speed of Ajay and Vijay.

$S_A = 5D/3x$ ……(2)

$S_V = D/2x$ ……(3)

Ratio of speeds of Ajay and Vijay

$S_A : S_V = 10 : 3$

6) Answer: A

Solution: According to the question.

Speed = Distance / Time …….(1)

First case:

S = 120/T ……(2)

Second case:

6S = 3 × 120/T - 4 …….(3)

From eq (2) and eq (3)

On solving:

T = 8 hours

S = 15 kmph

7) Answer: C

According to the question,

Time taken by Ayush : Karan = 1t : 4t ……..(1)

We know that

Speed = Distance/Time …….(2)

Distance travelled by Ayush : Karan = 5d : 2d …….(3)

Speed of Ayush = $S_A = 5d/1t$ ……(4)

Speed of Karan = $S_K = 2d/4t$ ……(5)

Taking ratios,

$S_A : S_K = 10 : 1$

8) Answer: A

According to the question,

Speed of Truck to Bus = 7s : 10s ……..(1)

Average speed = 2 × x × y/(x + y) …….(2)

35 = 2 × 7s × 10s / 17s

s = 8.5

Speed of Truck = 7s = 59.5 kmph

9) Answer: D

According to the question,

Speed ratio of P, Q and R = 5 : 2 : 1 …….(1)

Let distance = 10 units.

When distance is same,

Speed α 1/Time …….(2)

Time ratio of P, Q and R = 2 : 5 : 10

10) Answer: B

According to the question,

Time ratio of A , K and R = 2t : 5t : 4t …….(1)

Distance ratio of A , K and R = 4d : 3d : 7d …….(2)

Speed of Arnab = S_A = 2d/t

Speed of Kamal = S_K = 3d/5t

Speed of Raju = S_R = 7d/4t

S_A : S_K : S_R = 40 : 12 : 35

11) Answer: C

According to the question,

Initial Speed = 7 kmph

New speed = 10 kmph

From observation, if time = 10 hours

Then initial distance = 7 × 10 = 70 kms

Final distance = 10 × 10 = 100 kms

Difference = 30 kms (verified)

So, Time = 10 hours

Distance travelled = 10 × 7 = 70 kms

12) Answer: B

According to the question,

Speed ratio of A and B = 3 : 5 …….(1)

Time ratio of A and B = 5t : 3t ……..(2)

Difference = 2t

2t = 6 hours

1t = 3 hours

Time taken by Car B = 9 hours

Speed of Car B = 540/9 = 60 kmph

13) Answer: D

Solution: According to the question.

	Train	:	Truck
Time	5	:	2
Speed	2x	:	5x

Difference = 3x

Actual difference = 6 kmph

3x = 6 kmph

1x = 3 kmph

Speed of truck = 5x = 15 kmph

Time taken by Truck = 360/15 = 24 hours.

14) Answer: C

According to the question,

	A	:	B
Speed	2	:	3
Time	3t	:	2t

Time difference = 1t

1t = 6 minutes

Time taken by Ajit = 3 × 6 = 18 minutes

18 minutes = 3/10 hours

Speed of Ajit = Distance Travelled by Ajit/Time taken by Ajit

Speed of Ajit = 18 × 10/3

Speed of Ajit = 60 kmph

15) Answer: D

According to the question,

Let the initial speed = S kmph

Initial time = t hours

S = 880/t…….(1)

New speed = S - 25 kmph

New time = t + 5 hours

S - 25 = 880/t + 5 ……(2)

On solving eq (1) and eq (2)

We get, S = 80 kmph.

Time = 11 hours

New speed = 80 - 25 = 55 kmph

16) Answer: C

According to the question,

	Initial	:	New
Time	4t	:	5t
Speed	5	:	4

Difference = 1t

1t = 10 minutes = 1/6 hours

Initial timing = 40 minutes or 2/3 hours

Distance = 480 kms

Initial speed = 480 × 3/2

Speed = 720 kmph

17) Answer: B

According to the question,

	Manu	:	Tanu
Time	3	:	8

We know that

When distance is same; Speed α 1/Time ……(1)

Actual time taken by Manu = 3 hours

Speed = Distance travelled / Time …….(2)

Speed of Manu = 120/3 = 40 kmph

18) Answer: C

According to the condition,

Time taken in first part = 3.5 hours

Distance travelled in first part = 3.5 × 3 = 10.5 kms

Time taken in second part = 3 hours

Distance travelled in second part = 5.5 × 3 = 16.5 kms

Average speed = (Total distance)/(Total Time)

Average speed = 27/6.5 = 4.15 kmph

19) Answer: C

According to the question,

Speed of Train in 1st hour = 45 kmph ……(1)

After every hour speed = + 10%

Speed in 2nd hour = (110/100) × 45 = 49.5 kmph ……..(2)

Speed in 3rd hour = (110/100) X 49.5 = 54.45 kmph ……(3)

Adding all,

Total distance = 148.95 kms

20) Answer: D

According to the question,

Time ratio of A & B = 1 : 2……..(1)

Time ratio of C & B = 1 : 2……..(2)

Time ratio of A : B : C = 1 : 2 : 1 ……(3)

Since Distance is same

Let distance = 2 kms

Sped ratio of A : B : C = 2 : 1 : 2

21) Answer: A

According to the question,

Speed ratio of C and B = 4 : 3 …….(1)

Time ratio of C and B = 3t : 4t ……..(2)

Difference = 1t

1t = 5 hours

Time taken by Car = 15 hours

Speed of Car = 360/15

Speed of Car = 24 kmph

22) Answer: A

According to the question,

	Actual		Reduced
Speed	45	:	36
Time	4t	:	5t

Difference = 1t

Actual difference = 2 hours

1t = 2 hours

Actual time = 8 hours

Distance = Speed × Time

Distance = 45 × 8

Distance = 360 kms

23) Answer: A

According to the question,

	Actual		New
Speed	5	:	2
Time	2t	:	5t

Difference = 3t

3t = 15 minutes

1t = 5 minutes

Actual time = 10 minutes

Speed = Distance/Time

Speed = (50 × 6)/1

Speed = 300 kmph

24) Answer: C

According to the question,

	Priya		Tarun
Speed	2x	:	5x
Distance	3y	:	y

Time = Distance / Speed ……(1)

$Time_P = 3y/2x$……(2)

$Time_T = y/5x$……..(2)

Taking ratio,

Time ratio = 15 : 2

25) Answer: B

According to the question,

Sum of their speeds = Distance covered/Time taken ……(1)

(10 + 12) = 396/Time taken

Time taken = 18 hours

Hence, they will meet after 18 hours

26) Answer: B

According to the question,

	Normal		overloading
Speed	36	:	27
Time	3t	:	4t

Difference = 1t

1t = 2 hours

Time taken in overloading = 8 hours

Distance = Speed × Time

Distance = 27 × 8

Distance = 216 kms

27) Answer: C

According to the question,

Let the initial speed = S kmph

Initial time = t hours

S = 120/t…….(1)

New speed = S - 2 kmph

New time = t + 2 hours

S - 2 = 120/t + 2 ……(2)

On solving eq (1) and eq (2)

We get S = 12 kmph

Time = 10 hours

New speed of Car = 12 - 2 = 10 kmph

28) **Answer: B**

According to the question,

	Bus		Train
Speed	5	:	6
Time	6t	:	5t

Difference = 1t

1t = 1/2 hours

Time taken by Bus = 3 hours

Distance = 120 kms

Speed = Distance/Time

Speed = 120/3 = 40 kmph

29) Answer: B

According to the question,

Let the actual distance = D kms.

	A		B
Distance	80% of D	:	140% of D
Distance	4D	:	7D
Time	1	:	1

Speed = Distance / Time ……..(1)

$S_A : S_B = 4 : 7$

30) Answer: B

According to the condition,

	Actual		New
Speed	7	:	6
Time	6t	:	7t

Difference = 1t

1t = 3 hours

6t = 18 hours

Distance = Speed × Time …….(1)

Distance = 270 kms

Speed = 270/18

Speed = 15 kmph

31) **Answer: D**

According to the question,

	Earlier	:	later
Speed	20	:	16
Time	4t	:	5t

Difference = 1t

1t = 10 minutes

Earlier = 40 minutes

Actual time = 40 + 5 = 45 minutes

32) Answer: C

According to the question,

	Initial		New
Speed	8s	:	5s
Time	5t	:	8t

Difference = 3t

3t = 6 hours

1t = 2 hours

Initial Timing = 10 hours

Distance = 180 kms

Speed = 180/10

Speed = 18 kmph

33) Answer: A

According to the question,

Let the initial speed = S kmph

Let the initial time = T hours

S = 160/T ……..(1)

S + 4 = 160/(T - 2) …….(2)

From eq(1) and eq(2)

S = 16 kmph

T = 10 hours

34) Answer: C

According to the question,

Let the initial speed = S kmph

Let the initial time = T hours

S = 120/T ……..(1)

S + 5 = 120/(T - 2) …….(2)

From eq(1) and eq(2)

S = 15 kmph

T = 8 hours

Initial speed = 15 kmph

35) Answer: C

According to the question,

	Car		Bus
Speed	5	:	1
Time	1t	:	5t

Difference = 4t

4t = 16 minutes

1t = 4 minutes

Initial Timing = 4 minutes

Distance = 60 kms

Speed = (60×15)/1

Speed = 900 kmph

36) Answer: A

Let the initial speed = S kmph

Let the initial time = T hours

S = 150/T ……..(1)

S - 5 = 150/(T+5) …….(2)

From eq(1) and eq(2)

S = 15 kmph

T = 10 hours

New speed = 15 - 5 = 10 kmph

37) Answer: C

Let the speed of Rahul = S kmph

Speed of Ravi = (S + 15) kmph

Time taken by Ravi = 6 hours

Time taken by Rahul = T hours

Distance is same,

S = D / T ……..(1)

S + 15 = D / 6 …….(2)

From eq(1) and eq(2)

We can conclude that we have two equations and three variables. Hence the answer is cannot be determined.

38) Answer: A

	Car		Truck
Speed	5	:	1
Time	1t	:	5t

Difference of their speed = 4t

Difference = 4 hours

1t = 1 hours

Time taken by the Truck = 5 hours

Speed of Truck = 120/5 = 24 kmph

Time taken to cover 96 kms = 96/24

Time taken = 4 hours

39) Answer: A

When time is same then Speed α1/Time

Let the total Distance = 40 kms.

	Car	:	Bus	:	Bike
Speed	5	:	8	:	10
Time	8	:	5	:	4

Car : Bus : Bike = 8 : 5 : 4

40) Answer: B

When Distance is same then Speed α 1/Time,

Let the Distance = 15 kms

	A		B		C
Time	1	:	3	:	5
Speed	15	:	5	:	3

A : B : C = 15 : 5 : 3

41) Answer: D

When time is same then Speed α Distance

	P	:	Q	:	R
Distance	12	:	4	:	1
Speed	12	:	4	:	1

P : Q : R = 12 : 4 : 1

42) Answer: B

Speed = Distance Travelled / Time taken ……..(1)

Speed : Time = 4x : 1x……(2)

4x X 1x = 196

x = 7

Speed of Train = 4x = S = 28 kmph

New speed = 28/2 = 14 kmph.

Time = 196/14

Time taken = 14 hours.

43) Answer: B

Speed = Distance Travelled / Time taken ……..(1)

Speed : Time = 10x : 1x……(2)

10x X 1x = 160

x = 4

Speed of Train = 10x = S = 40 kmph

New speed = 40 - 5 = 35 kmph.

Time = 160/35

Time taken = 4.5 hours.

44) Answer: A

	Train		Truck
Time	3	:	4
Speed	4s	:	3s

Difference of their speed = 20 kmph

Difference = 1s

1s = 20 kmph

Speed of Train = 4s = 80 kmph

Answer: D

	Car		Truck
Time	5	:	3
Speed	3s	:	5s

Sum of their speed = 40 kmph

Sum = 8s

8s = 40 kmph

s = 5 kmph

Speed of Truck = 5s = 25 kmph

46) Answer: C

Common Distance = 60 kms

	C	:	T	:	B
Speed	3	:	1	:	2
Time	2t	:	6t	:	3t

3t = 6 hours

1t = 2 hours

So, time taken by Car = 4 hours

Speed of Car = 60/4 = 15 kmph

47) Answer: A

Common Distance = 96 kms.

	A	:	B	:	C
Speed	2	:	3	:	4
Time	6t	:	4t	:	3t

Since Distance = 96 kms.

6t = 6 hours

3t = 3 hours.

So, time taken by C = 3 hours.

Speed of C = 96/3 = 32 kmph.

48) Answer: D

	P		Q
Speed	1	:	2
Time	2t	:	1t

Difference = 1t

Actual difference = 4 hours

1t = 4 hours

Time taken by P = 8 hours

Time taken by Q = 4 hours

Average speed = (Total Distance)/Total time

Average speed = 240/12

Average speed = 20 kmph

49) Answer: C

	A		B
Time	2	:	1
Speed	1x	:	2x

Difference = 1x

Actual difference = 12 kmph

1x = 12 kmph

Speed of A = 12 kmph

50) Answer: A

Speed = Distance / Time ……(1)

For B:

Let T_B = Time taken by B

$10 = 120/T_B$

T_B = 12 hours

For A:

Time taken by A = 10 hours

$S_A = 120/10$

S_A = 12 kmph.