TSD ASSIGNMENT 5 (CIRCULAR)

Q1. Two guys Hunny and shahzar walk around a circle of 1200 meters ... speed of hunny is 150 meters/second and speed of shahzar is 80 meter per second. If we both start fom the same point at the same time and walk in same direction then

a) when will we be together at starting point

b)Number of disting meeting points

c) when will we be together at first time

d) at what distance they will meet at first time

e)find distance travelled by hunny and shahzar when we meet for 60th time'

Q2. Two guys Hunny and shahzar walk around a circle of 1200 meters ... speed of hunny is 150 meters/second and speed of shahzar is 80 meter per second. If we both start fom the same point at the same time and walk in same direction then

a) when will we be together at starting point

b)Number of disting meeting points

c) when will we be together at first time

d) at what distance they will meet at first time

e)find distance travelled by hunny and shahzar when we meet for 60th time

Q3.A , B and C running at speeds of 150 m/s , 70 m/s and 110 m/s respectively on a circular track of 1000 meters, A and B running clockwise and C anti-clockwise. If they keep running indefinitely, at how many distinct point on the circle would they meet?

Q4.P and Q start simultaneously from a point A on a circular track and run in the same direction. The speed of P is 9 times the speed of Q. How many times are they diametrically opposite to each other by the time Q completes 3 complete rounds on the track?

Q5. Seeta and Geeta are moving around a circular track with speeds in the ratio of
17:1. They start from a point X on the circular track simultaneously in the same direction. During the time Geeta covers 1 lap, how many times are they diametrically opposite each other

Q6.A & B start running around a circular track from same point at the same time in the same direction. A takes 7minutes to complete one round while B takes 9minutes to complete one round. When they meet for third time, How many rounds would A have completed?
1) 10.5 rounds

2) 15 rounds
3) 21 rounds
4) 27 rounds
5) 13.5 rounds

Q7. Three boys A,B,C start running at constant speeds from the same point P along the circumference of a circular track. Speeds of A,B,C are in the ratio 5:1:1. A and B runs clockwise while C runs anticlockwise. Each time A meets B or C on the track, he gives them a card. What is the difference in the number of cards received by B and C if A distributes 33 CARDS in total

Q8. Which of the following cannot be the ratio of speeds of two joggers running on a circular jogging track if while running they meet at a diametrically opposite point to the point from where both of them started?

(1) 3 : 5 (2) 1 : 3 (3) 1 : 5 (4) 2 : 5

Q9. Priyanka and Parul run a race with their speeds in the ratio of 5 : 3. They prefer to run on a circular track of circumference 1.2 km. What is the distance covered by Priyanka when she passes Parul the seventh time? (they run in the same direction)
(1) 21 km (2) 26 km
(3) 32 km (4) 33 km

Q10. Rahul and Sachin started running around a circular track in the same direction. They met each other for the third time after Rahul covered 15 laps in 5 hours and 30 minutes. Instead, had they been running in the opposite directions, after how minutes would they meet for the sixth time?

Ans 1- a) 120 seconds , b) 7 c) 120/7 seconds d) 80*120/7 e) 60*80*120/7 & 60*150*120/7

Ans 2- a) 120 seconds b)23 c) 120/23 seconds d) 80*120/23 e) 60*80*120/23 & 60*150*120/7

Ans 3- 2 , Ans 4- 24 ,Ans 5 – 16 ,Ans 6- 13.5 Rounds ,Ans 7- 7,Ans 8- 2:5 ,Ans 9- 21 km

Ans 10- 60 or 73.333