# Salutation to your solution!

- Sudhakar Attili.

1. There are 5 cities A, B, C, D and O. Each city is connected to the other four cities by highways in a shortest path. A is equidistant from B and C. Similarly D is also equidistant from B and C. Cities A and D are on either side of hwy BC. O is the intersection point of AD and BC. If AB=AC=50; BO=40; BD=CD=85, what is the distance between A and D?

2. As shown in figure below three identical circles are intersecting each other. Radius of each circle is 14 cm. The distance between the centers of first and third circle is 38 cm. Find the value of 'x'?
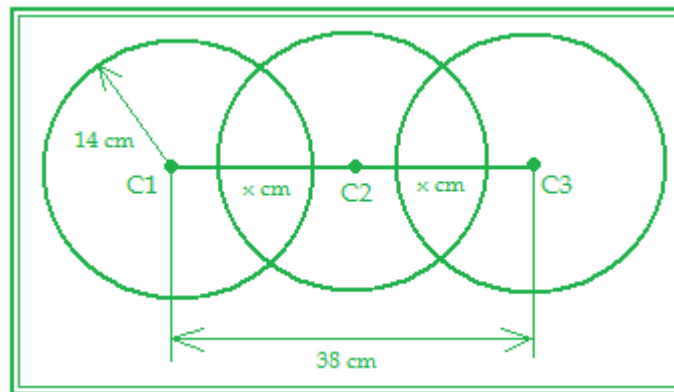
3. A 1000m lengthy train is passing a tunnel of length 1250m. If the train is going at a constant speed of 54 km/h, how long will it take to pass the tunnel?

4. A tent is placed for a circus in such a way that 4 cables from the top are tied at 4 different points on the ground forming a square with side $120\sqrt{2}$ meters. Each cable length from top to the ground is 125 meters? What is the vertical height of the tent?

5. What is the next three number in the following sequence?
   0, 7, 26, 63, 124, …, …, …, …

You can send your answers either by post or by e-mail to the below address on or before September 15th.

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