1. Find the coordinates of points C, D and E given that the length of each of the segments is the same.
2. Point  lies on  and is three times as far from  as it is from . Find the coordinates of point .
3. Mr. Khan walks from point A to point C, and then to point D. Point C is the midpoint of segment AB. If Mr. Khan leaves point A and can walk at a speed of 2.5km/h, how long will it take to arrive at point D? (remember: Time=Distance/Speed)

Three small towns are located in the Quebec countryside. A map of the region, scaled in kilometres, shows the location of these towns and the roads connecting them. On the map, ordered pairs indicate the coordinates of each town. The location of the hospital is also shown to be two thirds of the way from Quipply to Rougeville.



In order to make it easier for Pointon residents reach the hospital quickly, the government has decided to build a new road. The road will start at the midpoint between Pointon and Quipply and go directly to the hospital.

**Rounded to the nearest kilometre,** **how much shorter is it to go from Pointon to the hospital using the new road?**