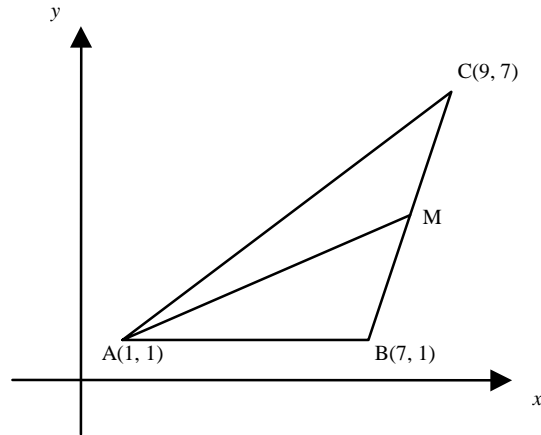


Name : _____

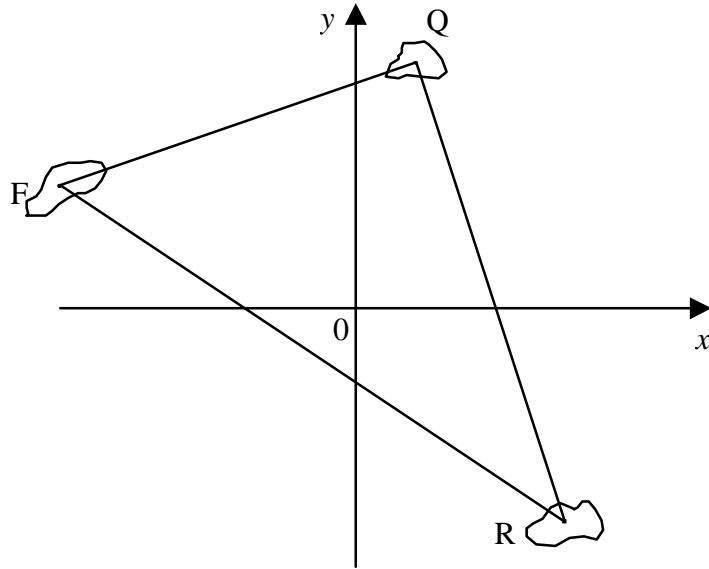
- 1 In a Cartesian plane, the coordinates of the vertices of triangle ABC are A(1, 1), B(7, 1) and C(9, 7). The median AM (from A to the midpoint of BC) is also drawn.



What is the perimeter of triangle AMB?

2 The positions of 3 islands are given by the following points :

$F(-10, 4)$, $Q(2, 8)$ and $R(7, -7)$



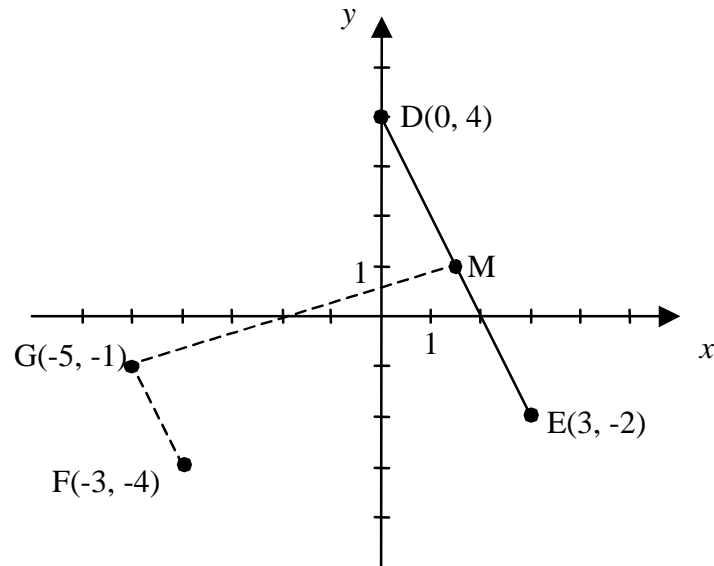
What distance, to the nearest tenth, would a boat have to travel to make a round trip to the three islands?

- 3 The water main in a new residential development must be made longer. The town surveyor drew the new part of the water main on a Cartesian plane, where

\overline{DE} represents the existing water main

M is the midpoint of \overline{DE}

\overline{FG} and \overline{GM} represent the new water main



Rounded to the nearest tenth, what is the total length of the new water main, FGM?

4

In a Cartesian co-ordinate system, La Tuque is located at point (3, 9), Baie-Comeau at point (21, 18) and Quebec City at point (9, 5).

Tadoussac is located at the midpoint of the segment joining the points corresponding to Quebec and Baie-Comeau.

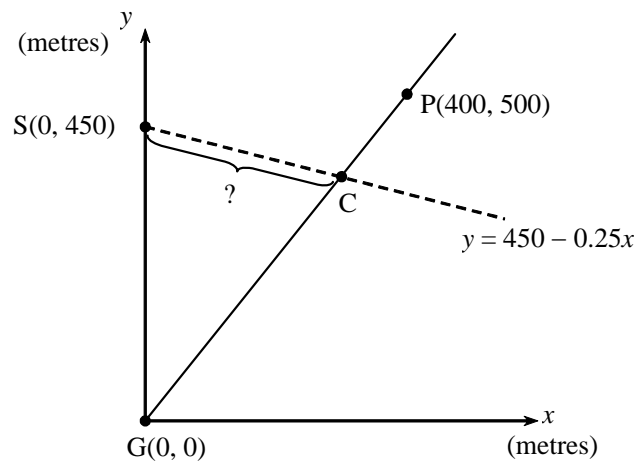
In Cartesian plane units, what is the measure of the segment joining the points corresponding to La Tuque and Tadoussac?

- 5 Rosalie spent a week at the Beausoleil Campground. She drew a map of the campground, with the y -axis passing through the games area (G) and the showers (S). She located her campsite (C) and the swimming pool (P). She also indicated the coordinates of some points.

The games area, her campsite, and the swimming pool lie in a straight line.

The equation of the line that passes through the showers and Rosalie's campsite is $y = 450 - 0.25x$.

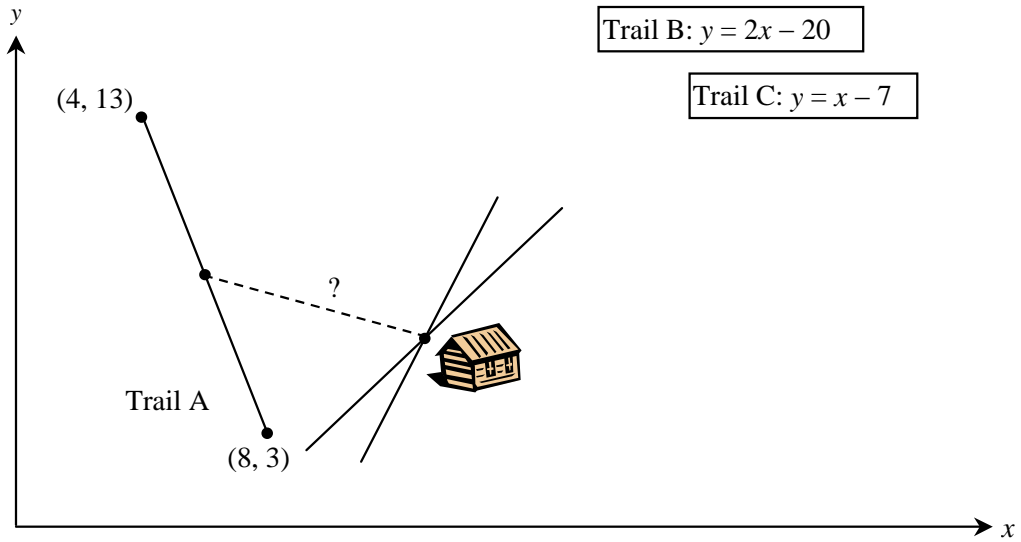
Map of Beausoleil Campground



To the nearest metre, what is the distance between Rosalie's campsite and the showers?

6 Three trails in a park are situated on a coordinate plane, scaled in km.

A cabin is located at the intersection of trails B and C, as shown in the diagram below.



A new trail is built, starting from the midpoint of trail A and going directly to the cabin.

Rounded to the nearest tenth of a km, what is the length of the new trail?