## Problem Set 1 Exercise #06: Triangle Centroid

**Reference:** Lecture 2 notes

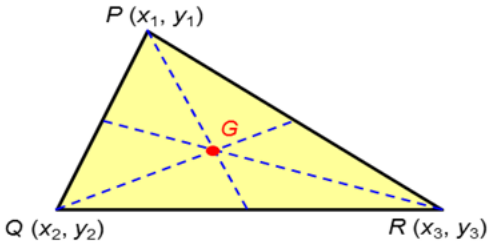
**Learning objective:** Formatting real number output

**Estimated completion time**: 15 minutes

### Problem statement:

In a triangle, a *median* is a line that connects a vertex to the midpoint of its opposite side. The intersection of the 3 medians is called the *centroid*.

In the diagram on the right, the medians are shown as blue dotted lines, and point G is the centroid.




Write a program **PS1_Ex06_TriangleCentroid.java** to read the coordinates (of type **double**) of 3 vertices of a triangle and compute the coordinates of its centroid.

You are to display the real numbers in two decimal places.

### Useful tips:

Given three vertices of a triangle **$(x_1, y_1)$**, **$(x_2, y_2)$** and **$(x_3, y_3)$**, the coordinates of centroid is calculated as **$( (x_1+x_2+x_3)/3, (y_1+y_2+y_3)/3 )$**.

### Sample run #1:

```
Coordinates of 1st vertex: 0 0
Coordinates of 2nd vertex: 0 1
Coordinates of 3rd vertex: 1 1
Coordinates of centroid = (0.33, 0.67)
```

### Sample run #2:

```
Coordinates of 1st vertex: 4.8 12.7
Coordinates of 2nd vertex: -12.3 8.2
Coordinates of 3rd vertex: -5.6 15.3
Coordinates of centroid = (-4.37, 12.07)
```