Parallel and Perpendicular Lines: Question 16

Ana Bhattacharjee

August 23, 2019

The picture of triangle PQR is shown below.

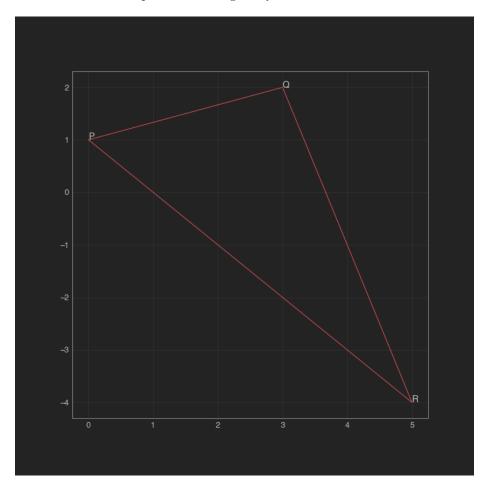


Figure 1: Triangle PQR

From the triangle above, I will calculate the slopes of PQ and QR to see

whether or not the triangle is a right triangle.

$$slope_{PQ} = \frac{2-1}{3-0} = \frac{2}{3} \tag{1}$$

$$slope_{PQ} = \frac{2-1}{3-0} = \frac{2}{3}$$

$$slope_{QR} = \frac{-4-2}{5-3} = \frac{-6}{2} = -3$$
(2)

Since the slopes don't multiply to get -1, the triangle PQR is not a right triangle.