

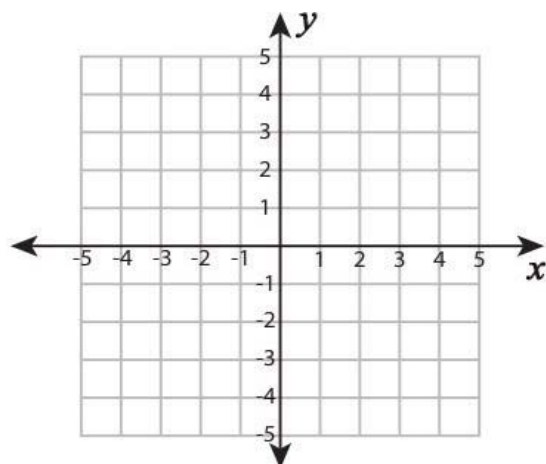
## Step By Step Coordinate Plane Line Segments Measures Lesson

### Question:

Bryant's hot air balloon is located at  $(-3, 4)$ .

Michelle's hot air balloon is located at  $(-3, -2)$ .

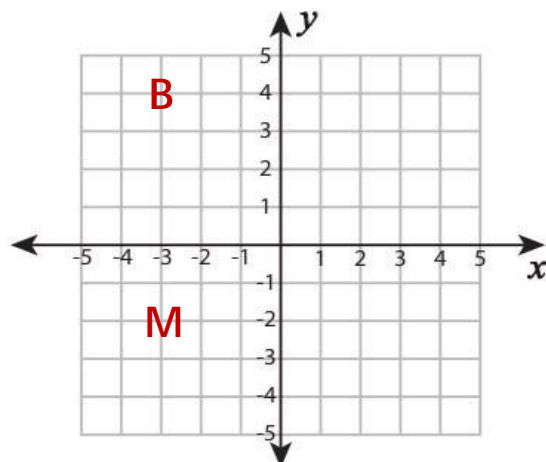
If each unit on the coordinate plane is equivalent to one mile, how far are Bryant's and Michelle's balloon apart?



### Explanation:

Step 1) Locate the position of the 2 hot air balloons.

Let's plot their points on the coordinate plane.

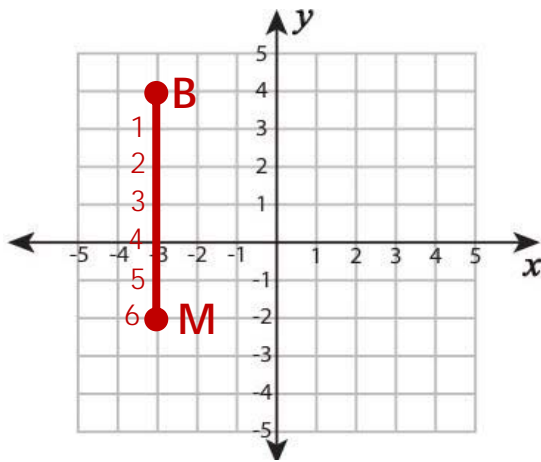


Bryant's hot air balloon **(B)** =  $(-3, 4)$   $x = -3, y = 4$

Michelle's hot air balloon **(M)** =  $(-3, -2)$   $x = -3, y = -2$



Step 2) Find the length between the two points. You can simply do this by counting the number of box ends between the points.



We can see that we travel 6 units from point to point (balloon to balloon).

Since each unit is 1 mile ( 6 units x 1 mile) – 6 miles.

So there are 6 miles between the points (balloons).

