Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 12/4/2014

Find the equation of the line with the given slope that passes through the given point. Write the equation of the line in point-slope form.

y – y1 = m (x - x1)

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| --- | --- | --- | --- |
| 1. m = 2 and (-1, -3) | 2. m = -7 and (1, -1)  ` | 3. m = -2 and (-5, -2) | 4. m = 6 and (-2, 5) |

Find the equation of each line graphed below. Write in point slope form.

|  |  |
| --- | --- |
| [http://domathtogether.com/wp-content/uploads/2012/10/coordinate-plane1.png](http://www.google.com/url?sa=i&source=images&cd=&cad=rja&docid=Hwrce0OsLvCvLM&tbnid=gph7zqqt5vW0DM:&ved=0CAgQjRwwAA&url=http://domathtogether.com/prob/random-walk-in-the-plane/coordinate-plane-2/&ei=X9pJUvqUC6K6yQHM84GQAg&psig=AFQjCNGyrx0dLHGIwWZQXkt4j0EOHcm_5g&ust=1380658143221800) | point ( , )  m = \_\_\_\_\_\_\_\_\_\_\_\_\_\_  y – y1 = m (x - x1)  ­­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| [http://domathtogether.com/wp-content/uploads/2012/10/coordinate-plane1.png](http://www.google.com/url?sa=i&source=images&cd=&cad=rja&docid=Hwrce0OsLvCvLM&tbnid=gph7zqqt5vW0DM:&ved=0CAgQjRwwAA&url=http://domathtogether.com/prob/random-walk-in-the-plane/coordinate-plane-2/&ei=X9pJUvqUC6K6yQHM84GQAg&psig=AFQjCNGyrx0dLHGIwWZQXkt4j0EOHcm_5g&ust=1380658143221800) | point ( , )  m = \_\_\_\_\_\_\_\_\_\_\_\_\_\_  y – y1 = m (x - x1)  ­­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| [http://domathtogether.com/wp-content/uploads/2012/10/coordinate-plane1.png](http://www.google.com/url?sa=i&source=images&cd=&cad=rja&docid=Hwrce0OsLvCvLM&tbnid=gph7zqqt5vW0DM:&ved=0CAgQjRwwAA&url=http://domathtogether.com/prob/random-walk-in-the-plane/coordinate-plane-2/&ei=X9pJUvqUC6K6yQHM84GQAg&psig=AFQjCNGyrx0dLHGIwWZQXkt4j0EOHcm_5g&ust=1380658143221800) | point ( , )  m = \_\_\_\_\_\_\_\_\_\_\_\_\_\_  y – y1 = m (x - x1)  ­­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

Graph the equation in point slope form below.

|  |  |
| --- | --- |
| y – 2 = (x – 1)  point ( , )  m = \_\_\_\_\_\_\_\_\_\_\_\_\_\_ | [http://domathtogether.com/wp-content/uploads/2012/10/coordinate-plane1.png](http://www.google.com/url?sa=i&source=images&cd=&cad=rja&docid=Hwrce0OsLvCvLM&tbnid=gph7zqqt5vW0DM:&ved=0CAgQjRwwAA&url=http://domathtogether.com/prob/random-walk-in-the-plane/coordinate-plane-2/&ei=X9pJUvqUC6K6yQHM84GQAg&psig=AFQjCNGyrx0dLHGIwWZQXkt4j0EOHcm_5g&ust=1380658143221800) |
| y + 2 = (x + 1)  point ( , )  m = \_\_\_\_\_\_\_\_\_\_\_\_\_\_ | [http://domathtogether.com/wp-content/uploads/2012/10/coordinate-plane1.png](http://www.google.com/url?sa=i&source=images&cd=&cad=rja&docid=Hwrce0OsLvCvLM&tbnid=gph7zqqt5vW0DM:&ved=0CAgQjRwwAA&url=http://domathtogether.com/prob/random-walk-in-the-plane/coordinate-plane-2/&ei=X9pJUvqUC6K6yQHM84GQAg&psig=AFQjCNGyrx0dLHGIwWZQXkt4j0EOHcm_5g&ust=1380658143221800) |
| y - 2 = (x + 1)  point ( , )  m = \_\_\_\_\_\_\_\_\_\_\_\_\_\_ | [http://domathtogether.com/wp-content/uploads/2012/10/coordinate-plane1.png](http://www.google.com/url?sa=i&source=images&cd=&cad=rja&docid=Hwrce0OsLvCvLM&tbnid=gph7zqqt5vW0DM:&ved=0CAgQjRwwAA&url=http://domathtogether.com/prob/random-walk-in-the-plane/coordinate-plane-2/&ei=X9pJUvqUC6K6yQHM84GQAg&psig=AFQjCNGyrx0dLHGIwWZQXkt4j0EOHcm_5g&ust=1380658143221800) |