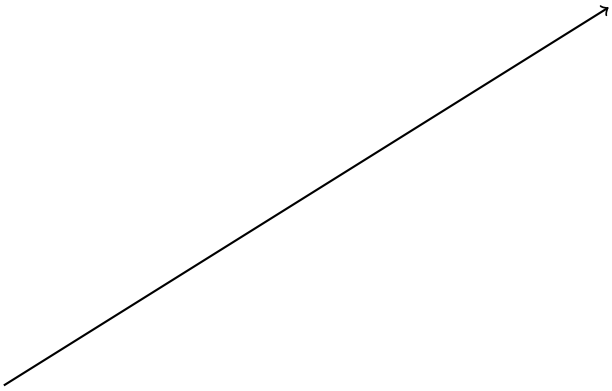
MTH 309 - Activity 2
Basis, span, linear independence

Consider the vector space $V = \mathbb{R}^2$.

1. How would you describe to a non-math student how to locate the vector (3,5)? Provide step-by-step instructions.
2. If you and your friend both plotted the vector (3,5), would the arrows line up *perfectly* (assuming that you can draw a perfectly straight line)? Give it a try! No peeking. You and your friend should draw your vectors completely independently.
3. If your answer to the previous question was "No", why not?
4. Determine the coordinate of the following vector.



5. What steps were required to accomplish the task?
6. Compare your coordinates to a classmates. Are they the same? Are they different? If they are different, why do you think that is?