

Name \_\_\_\_\_

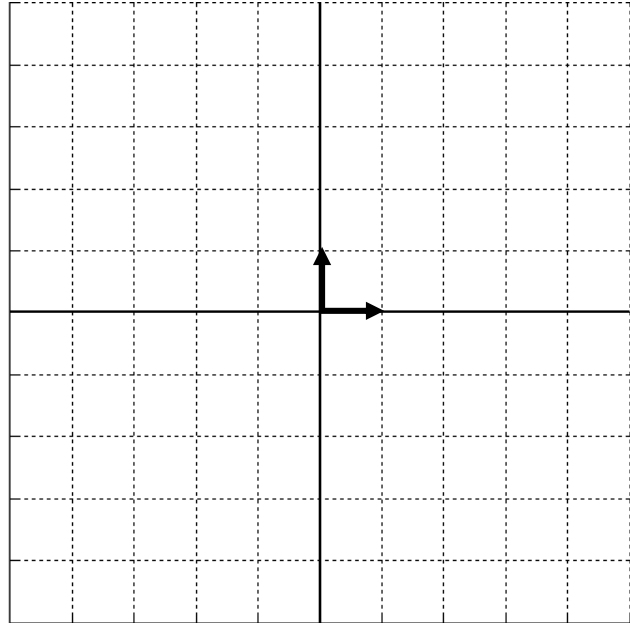
EXCEL EA-1 Quiz 1  
June 30<sup>th</sup>, 2016

Please show your work or describe your reasoning. Do not simply mark an answer without context.

### Problem 1:

Draw the following vectors, with the tail at the origin (0,0). Assume a basis with two vectors:  $\hat{x}$  points to the right and  $\hat{y}$  points upwards. You may use either the geometric or algebraic method, but make sure your final answers are clearly drawn and labeled in the figure.

- a)  $\vec{a} = [1, 2]$
- b)  $\vec{b} = [3, -1]$
- c)  $\vec{c} = \vec{a} + \vec{b}$
- d)  $\vec{d} = \vec{c} - 2\vec{b}$
- e)  $\vec{e} = -2\vec{a}$



### Problem 2: MATLAB

Assume that the workspace and command window have been cleared. What is the output from the following scripts? If an error would result, *briefly* explain why.

```
a = 2;  
2 = b;  
c = (a + b)
```

```
a = 2 + 1;  
b = 3;  
a = a + 1;  
c = a * b
```

```
a = 3;  
b = 2;  
c = b * a+b/2
```

Error

Error

Error

List one concept that confuses you, or one question you would like me to answer