4.8A Vectors

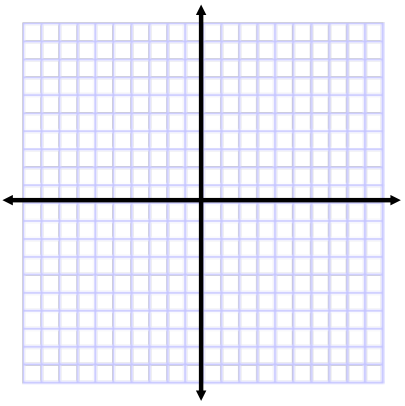
AP Precalculus

Name: _____

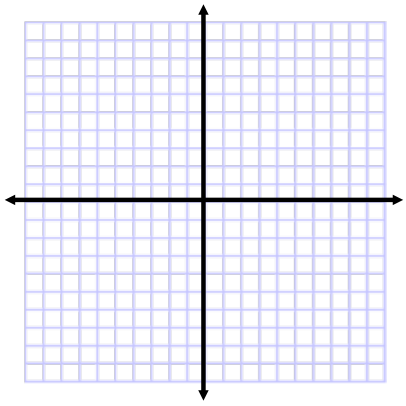
CA #2

Instructions: Graph each vector from the origin. Find the magnitude.

1) $< -3, 5 >$



2) $< 4, 7 >$



Directions: Use the following vectors to simplify the following expressions.

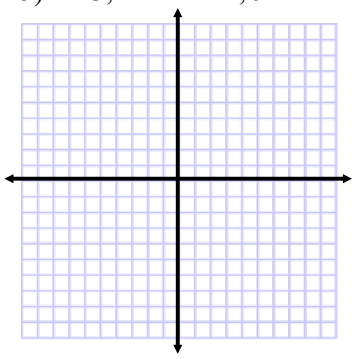
$\boldsymbol{u} = < 2, 8 >, \boldsymbol{v} = < -4, -9 >$

3) **2v** – 5**u**

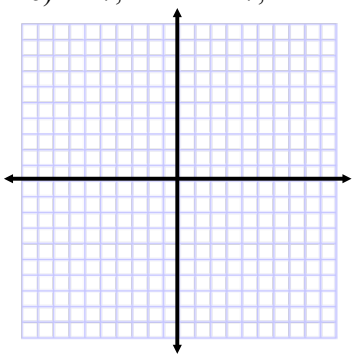
4) **3u** + **6v**

Directions: Add the vectors graphically.

5) $< 3, -4 > + < 4, 9 >$



6) $< 7, -1 > + < -7, 2 >$

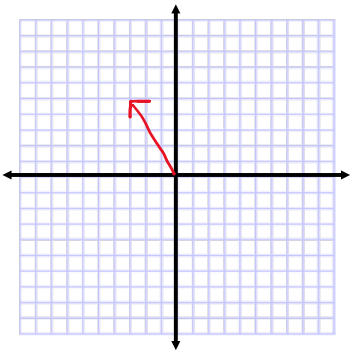


Directions: Find the components of the vector given the magnitude and direction.

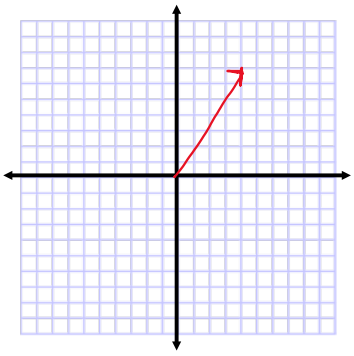
7) $\|\mathbf{w}\| = 35, \theta = 85°$

8) $\|\mathbf{w}\| = 12, \theta = 170°$

1)



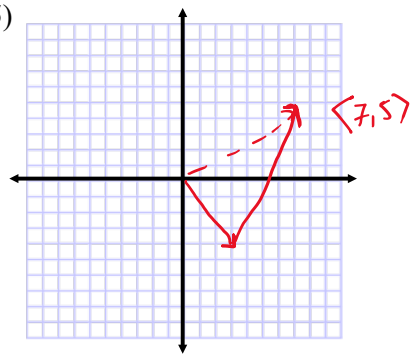
2)



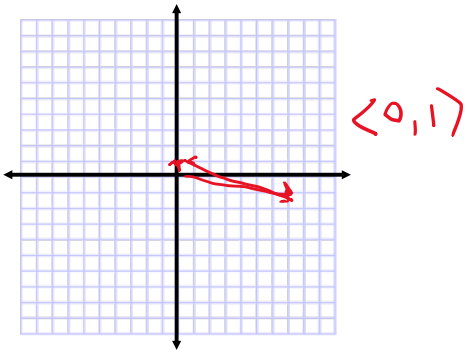
3) < -18, -58 >

4) < -18, -12 >

5)



6)



7) < 3.05, 34.87 >

8) < -11.82, 2.08 >