Vectors

Name_____

B (1, 2)
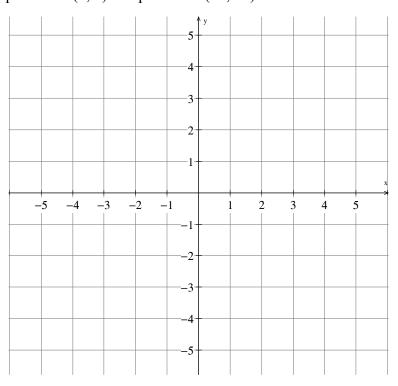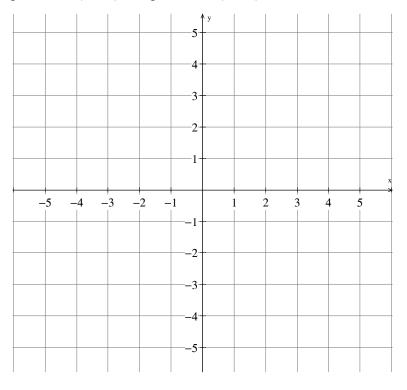
A (3, –2)

Q (–1, –3)

Find the component form and magnitudes for vectors $\overrightarrow{AB}$ and $\overrightarrow{AQ}$

Sketch and write the vectors formed by the given points

1) The vector **v** which is the line segment $\overrightarrow{AB}$ in which point A is (3, 0) and point B is (−5, −4)

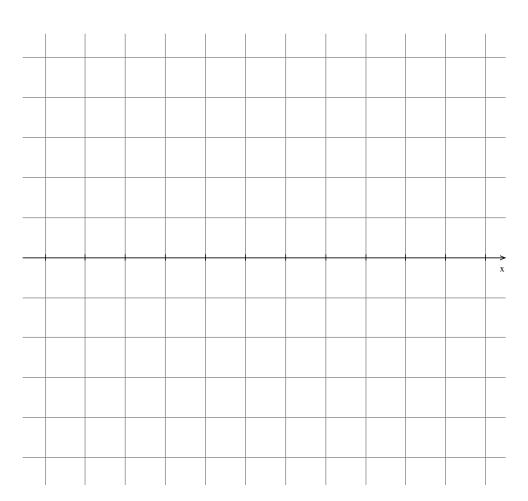2) The vector **v** which is the line segment $\overrightarrow{CD}$ in which point C is (4, −1) and point D is (−5, 3)

Sketch and add the following vectors. Find all three vector magnitudes.

2) $\mathbf{v} = \langle 2, 1 \rangle$ and $\mathbf{u} = \langle 4, -1 \rangle$

x

3) $\mathbf{v} = -2i - j$ and $\mathbf{u} = -4i + j$

x

Vector Components

Write the component form of the vector **v** given $|v| = 5$ and $\theta = 30°$