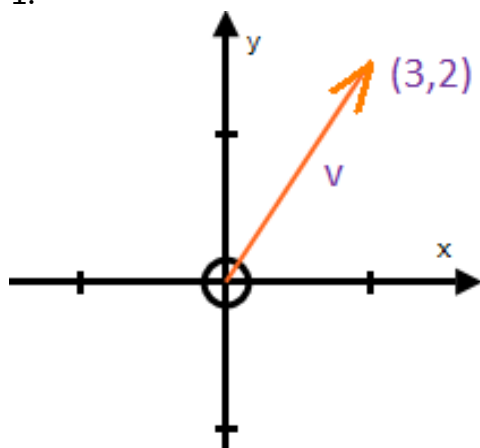


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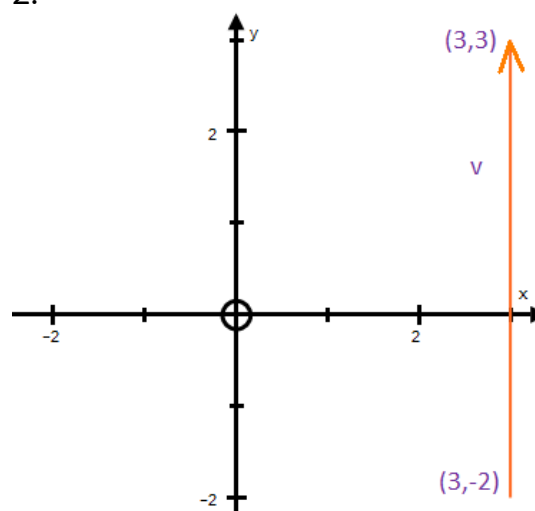
Vectors in the Plane

Exercise 1: Find the component form and the magnitude of the vector v

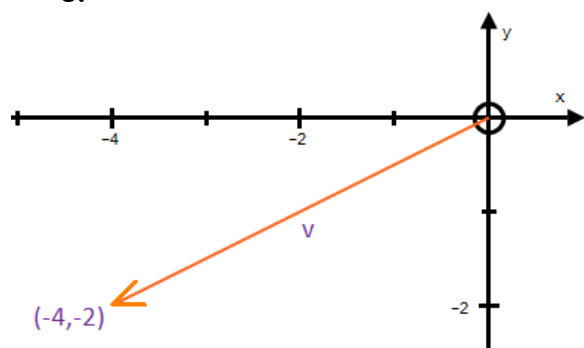
1.



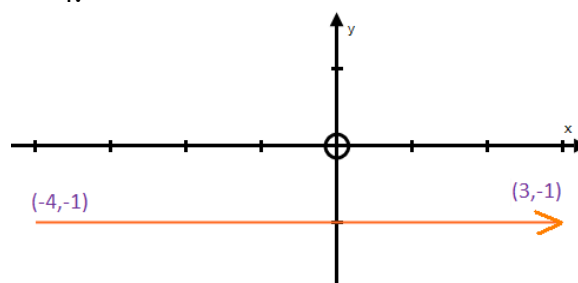
2.



3.



4.



Exercise 2: Find the component form and the magnitude of the vector v given that A is the initial point and B is the terminal point.

1) $A(1,2);B(3,2)$

2) $A(3,3);B(4,5)$

3) $A(0,5);B(4,8)$

4) $A(-1,5);B(15,12)$

5) $A(1,11);B(9,3)$

6) $A(-3,-5);B(5,1)$

7) $A(1,3);B(-8,-9)$

8) $A(6,10);B(6,0)$

9) $A(3,2);B(6,5)$

10) $A(3,7);B(-6,7)$

Exercise 3: Find $u + v, u - v$ and $2u - 4v$

1) $u = \langle 2, 1 \rangle, v = \langle 1, 3 \rangle$

2) $u = \langle 2, 3 \rangle, v = \langle 0, 4 \rangle$

3) $u = \langle -5, 3 \rangle, v = \langle 0, 0 \rangle$

4) $u = \langle 0, 0 \rangle, v = \langle 2, 1 \rangle$

5) $u = \langle 3, 4 \rangle, v = \langle -5, -1 \rangle$

6) $u = \langle 2, -9 \rangle, v = \langle -2, 9 \rangle$

7) $u = \langle 5, 4 \rangle, v = \langle -3, 2 \rangle$

8) $u = \langle 3, 3 \rangle, v = \langle 7, -3 \rangle$