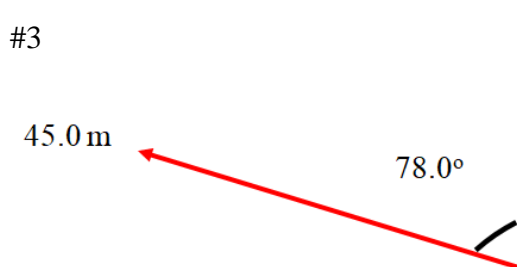
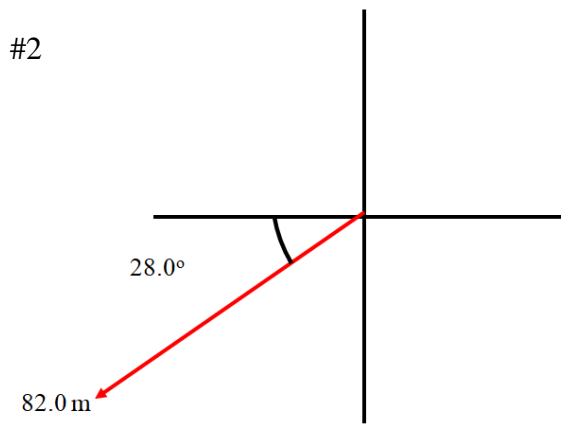
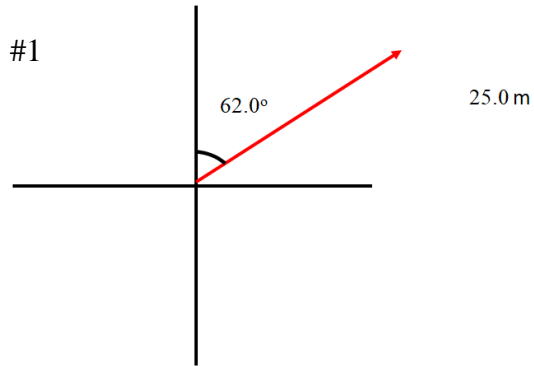


3.1 Vector Quizlette (turn this in)

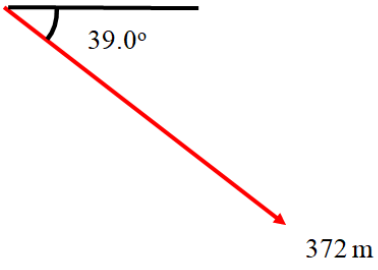
Name _____

B. Find these Vector Components:

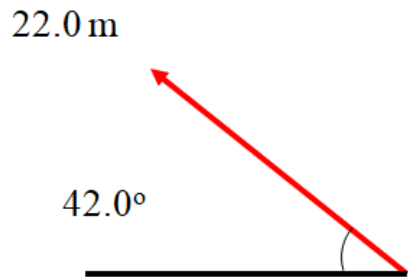


#1: 22.1 m x + 11.7 m y #2: -72.4 m, x + -38.5 m y #3: -44.0 m x + 9.36 m y

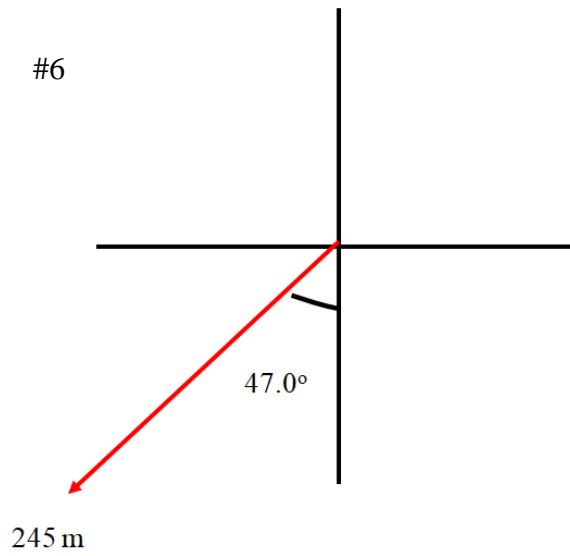
#4



#5



#6



#4: $289\text{ m x} + -234\text{ m y}$ #5: $-16.3\text{ m x} + 14.7\text{ m y}$ #6: $-179\text{ m x} + -167\text{ m y}$

C. Add these component vectors:

<p>A: $12 \text{ m x} + 34 \text{ m y}$ B: $16 \text{ m x} + 9.0 \text{ m y}$ A+ B:</p> <p style="text-align: right;">#a</p> <p>$28 \text{ m x} + 43 \text{ m y}$</p>	<p>A: $1.20 \text{ m x} + 3.10 \text{ m y}$ B: $-5.30 \text{ m x} + 1.30 \text{ m y}$ A+ B:</p> <p style="text-align: right;">#b</p> <p>$-4.1 \text{ m x} + 4.4 \text{ m y}$</p>
<p>A: $3.60 \text{ m x} + -5.60 \text{ m y}$ B: $12.5 \text{ m x} + 8.10 \text{ m y}$ A+ B:</p> <p style="text-align: right;">#c</p> <p>$16.1 \text{ m x} + 2.50 \text{ m y}$</p>	<p>A: $12.6 \text{ m x} + 58.1 \text{ m y}$ B: $16.5 \text{ m x} + -96.0 \text{ m y}$ A+ B:</p> <p style="text-align: right;">#d</p> <p>$29.1 \text{ m x} + -37.9 \text{ m y}$</p>

D. Draw these vectors as Angle Magnitude vectors. The vector should be an arrow, and calculate and label its magnitude (hypotenuse) and the angle:

1) $6.00 \text{ m x} + 8.00 \text{ m y}$

2) $-4.50 \text{ m x} + 6.40 \text{ m y}$

3) $-5.12 \text{ m x} + -3.90 \text{ m y}$

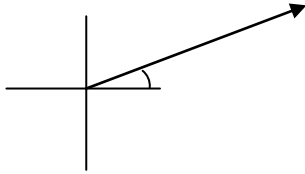
4) $56.3 \text{ m x} + -37.0 \text{ m y}$

1) 10.0 m right and up 53.1° above the x axis, 2) 7.82 m left and up at 54.9° above the x axis
 3) 6.44 m left and down 37.3° below the x axis, 4) 67.4 m right and down 33.3° below the x axis

E1: Adding two Angle Magnitude Vectors (Just like the test...)

Find the Components of these two vectors:
Carry three decimal places in your calculations.

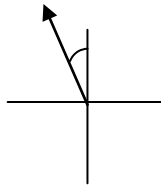
Mag. = 12.0 m, $\theta = 21.0^\circ$



$$1 = \underline{\hspace{2cm}}x + \underline{\hspace{2cm}}y$$

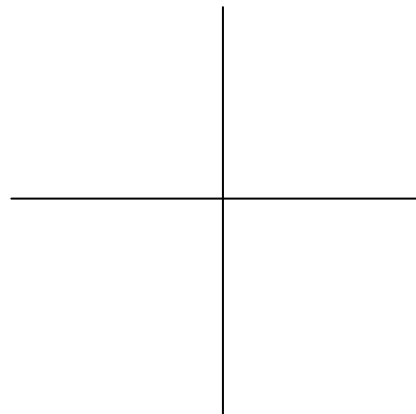
$$2 = \underline{\hspace{2cm}}x + \underline{\hspace{2cm}}y$$

Mag. = 8.00 m, $\theta = 107^\circ$



$$\text{Add the Two Vectors: } 1+2 = \underline{\hspace{2cm}}x + \underline{\hspace{2cm}}y$$

Draw a picture of the resultant vector with its tail on the origin, find its magnitude, and label an angle indicating its direction:

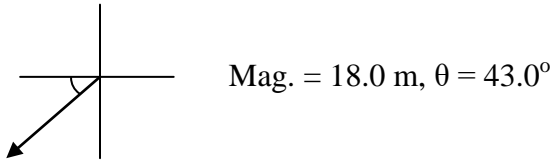


mag	angle	x	y
12	21	11.203	4.300
8	107	-2.339	7.650
		8.864	11.951
	mag	14.9 m	
	angle	53.4°	

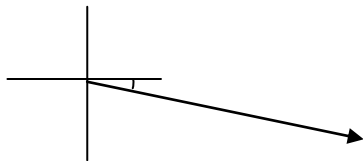
14.9 m, up and right, above 53.4° the x-axis

E2: Adding two Angle Magnitude Vectors

Find the Components of these two vectors:
Carry three decimal places in your calculations.



$$1 = \underline{\hspace{2cm}}x + \underline{\hspace{2cm}}y$$

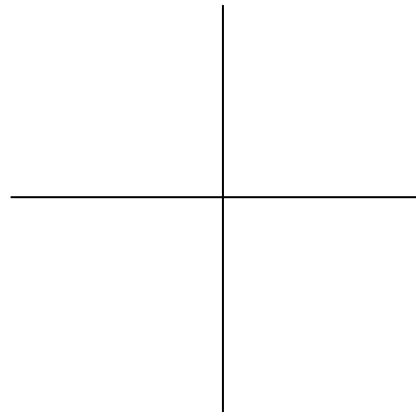


$$2 = \underline{\hspace{2cm}}x + \underline{\hspace{2cm}}y$$

Mag. = 42.0 m, $\theta = 12^\circ$

Add the Two Vectors: $1+2 = \underline{\hspace{2cm}}x + \underline{\hspace{2cm}}y$

Draw a picture of the resultant vector with its tail on the origin, find its magnitude, and label an angle indicating its direction:



mag	angle	x	y
18	223	-13.164	-12.276
42	348	41.082	-8.732
		27.918	-21.008
		mag	34.9 m
		anglex	-37.0 o

34.9 m, right and down at 37° below the x axis