

## Vector Components and Addition

Complete the table.

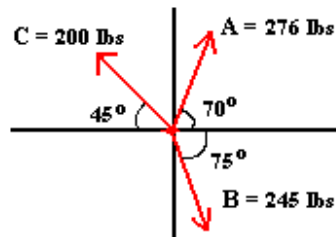
	Horizontal Component ( <i>a</i> )	Vertical Component ( <i>b</i> )	Component Form of Vector	Angle with Horizontal ( $\theta$ )	Magnitude
1.			$\langle 5, 7 \rangle$		
2.	8	14			
3.				$36^\circ$	7.225
4.	-1	5			
5.				$62^\circ$	14.5
6.	9	-2			
7.			$\langle -8, 4 \rangle$		

Use the vectors *u* and *v* to complete each row.

	u	v	u + v	2u	5v	2u - 5v
8.	$\langle 3, 4 \rangle$	$\langle -2, 1 \rangle$				
9.	$\langle 0.5, -3 \rangle$	$\langle 5, 2 \rangle$				
10.	$\langle 0, -3 \rangle$	$\langle -1, 1 \rangle$				

Write each vector in component form and then add the vectors together.

11.



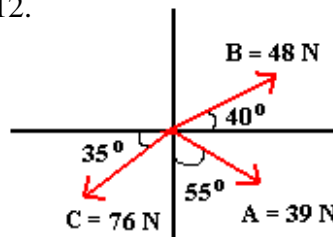
$$\vec{A} = \langle \quad, \quad \rangle$$

$$\vec{B} = \langle \quad, \quad \rangle$$

$$\vec{C} = \langle \quad, \quad \rangle$$

$$\vec{A} + \vec{B} + \vec{C} = \langle \quad, \quad \rangle$$

12.



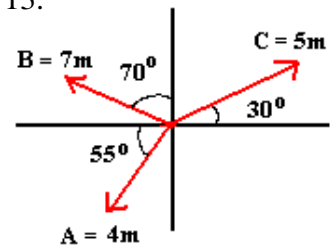
$$\vec{A} = \langle \quad, \quad \rangle$$

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13.



$$\vec{A} = \langle \quad, \quad \rangle$$

$$\vec{B} = \langle \quad, \quad \rangle$$

$$\vec{C} = \langle \quad, \quad \rangle$$

$$\vec{A} + \vec{B} + \vec{C} = \langle \quad, \quad \rangle$$