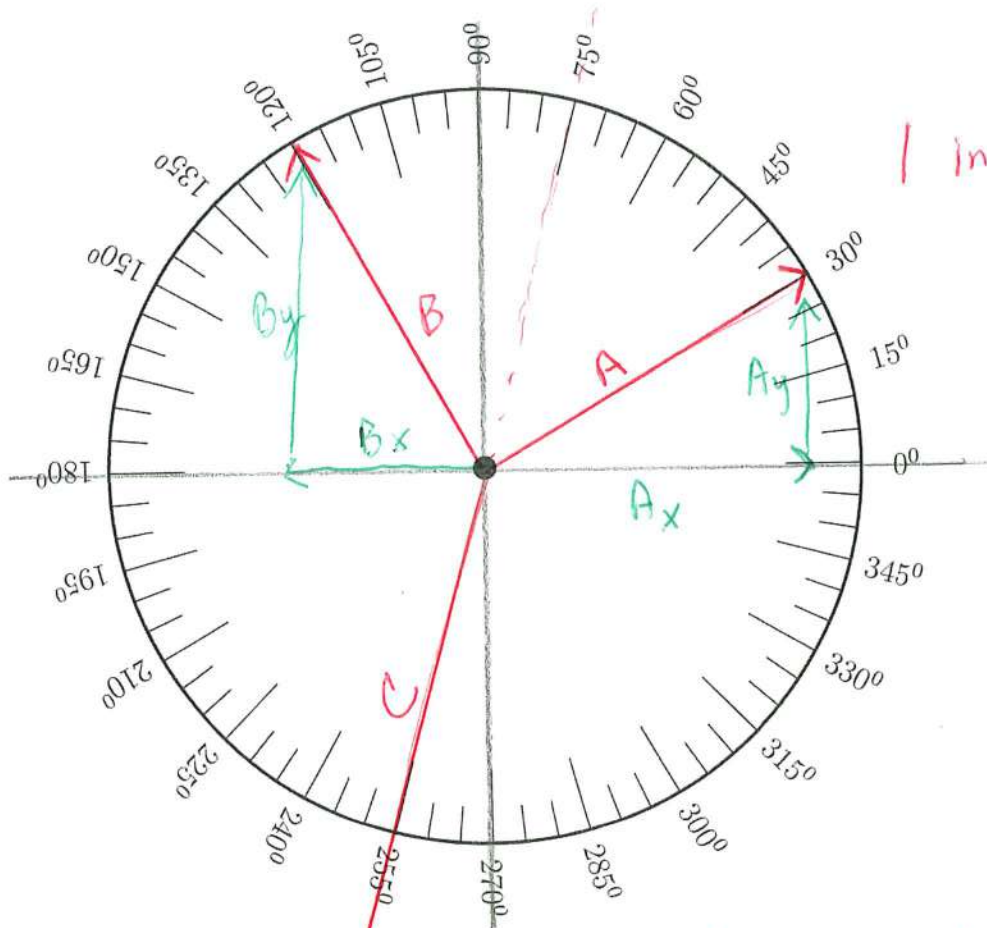




Case I. $\vec{A} + \vec{B} + \vec{C} = \vec{0}$

$V(\cos \theta)$ $V(\sin \theta)$

vector	mass, kg	magnitude, N	direction	x-component	y-component
$\vec{A}$	$0.200 \times 9.8 = 1.96$	1.96	30°	$1.96(\cos 30) = 1.7$	$1.96(\sin 30) = 0.98$
$\vec{B}$	$0.200 \times 9.8 = 1.96$	1.96	120°	-0.98	1.70
$\vec{C}$	0.28	2.78	255°	-0.72	-2.68

$\div 9.8$

$\Sigma x = 0$ $\Sigma y = 0$

verified: _____

$$\tan^{-1}\left(\frac{\text{opp}}{\text{adj}}\right)$$

$$\tan^{-1}\left(\frac{2.68}{0.72}\right)$$

$$\sqrt{2.68^2 + 0.72^2}$$

$$\begin{array}{r} 75^\circ \\ + 180 \\ \hline 255^\circ \end{array}$$

1 inch = 1 N

