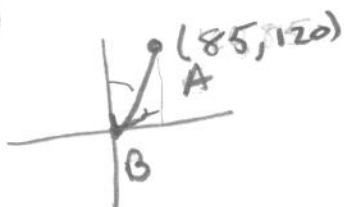


(34)



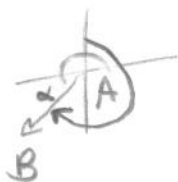
$$\vec{AB} = \langle -85, -120 \rangle$$

$$\tan \alpha = \frac{-120}{-85}$$

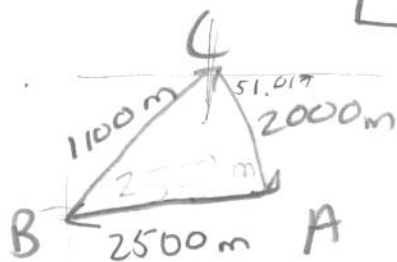
$$\alpha = 54.689^\circ$$

$$\Theta_b = 270^\circ - 54.689^\circ$$

$$\Theta_b = 215.311^\circ$$



(18)



$$1100^2 = 2000^2 + 2500^2 - 2(2000)(2500)\cos A$$

$$A = 25.311^\circ$$

$$\frac{\sin 25.311}{1100} = \frac{\sin B}{2000}$$

$$B = 51.017^\circ$$

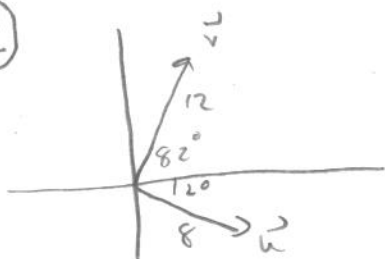
$$C = 103.672^\circ$$

$$A \rightarrow \Theta_b = 64.689^\circ$$

$$B \rightarrow \Theta_b = 38.983^\circ$$

$$C \rightarrow \Theta_b = 141.017^\circ$$

(42)



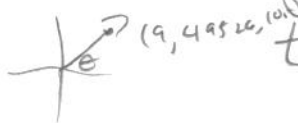
$$\vec{u} = 8 \langle \cos(12^\circ), \sin(12^\circ) \rangle$$

$$\vec{v} = 12 \langle \cos 82^\circ, \sin 82^\circ \rangle$$

$$\vec{u} + \vec{v} = \langle 8 \cos(12^\circ) + 12 \cos 82^\circ; 8 \sin(12^\circ) + 12 \sin 82^\circ \rangle$$

$$\vec{u} + \vec{v} = \langle 9.49526, 10.21992 \rangle$$

$$|\vec{u} + \vec{v}| = \sqrt{13.950}$$



$$\tan \theta = \frac{10.21992}{9.49526}$$

$$\theta_c = 47.105^\circ$$