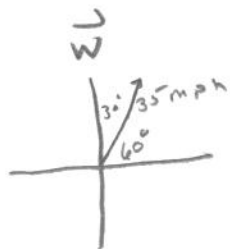
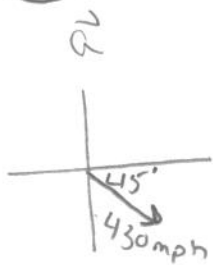


(48)



$$\vec{a} + \vec{w} = \vec{g}$$

$$\vec{g} = \langle 430 \cos 45^\circ + 35 \cos 60^\circ, 430 \sin 45^\circ + 35 \sin 60^\circ \rangle$$

$$\vec{a} = 430 \langle \cos 45^\circ, \sin 45^\circ \rangle$$

$$\vec{g} = \langle 321.55592, -273.7456 \rangle$$

$$\vec{w} = 35 \langle \cos 60^\circ, \sin 60^\circ \rangle$$

$$|\vec{g}| = 4122.297 \text{ mph}$$

$$\tan \theta = \frac{-273.7456}{321.55592}$$

$$\theta_c = -40.408$$

$$\theta_b = 130.08^\circ$$

(74)  $\vec{a} = 580 \langle \cos 150^\circ, \sin 150^\circ \rangle$



$$\vec{a} + \vec{w} = \vec{g}$$

$$\vec{g} = \langle 580 \cos 150^\circ + 60 \cos 45^\circ, 580 \sin 150^\circ + 60 \sin 45^\circ \rangle$$

$$\vec{w} = 60 \langle \cos 45^\circ, \sin 45^\circ \rangle$$

$$\vec{g} = \langle -459.86833, 332.42641 \rangle$$

$$|\vec{g}| = 567.438 \text{ mph}$$

$$\tan \theta = \frac{332.42641}{-459.86833}$$

$$\theta = -35.862$$

$$\theta_c = 54.138^\circ$$

$$N 54.138^\circ W$$