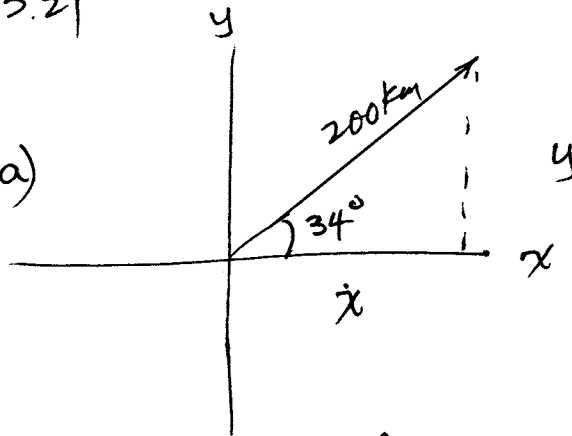


3.21

a)



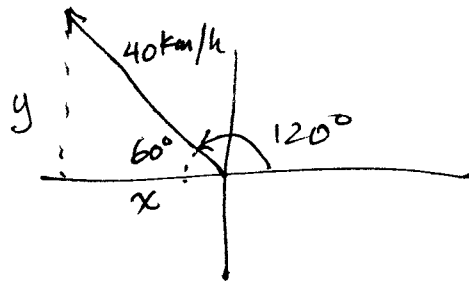
$$\frac{x}{200} = \cos 34^\circ$$

$$x = 200 \cos 34^\circ = \boxed{165.8 \text{ km}}$$

$$\frac{y}{200} = \sin 34^\circ$$

$$y = 200 \sin 34^\circ = \boxed{111.8 \text{ km}}$$

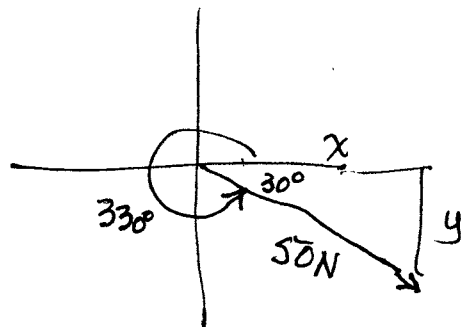
b)



$$x = -40 \cos 60^\circ = \boxed{-20 \text{ km/h}}$$

$$y = 40 \sin 60^\circ = \boxed{34.6 \text{ km/h}}$$

c)



$$x = 50 \cos 30^\circ = \boxed{43.3 \text{ N}}$$

$$y = -50 \sin 30^\circ = \boxed{-25 \text{ N}}$$