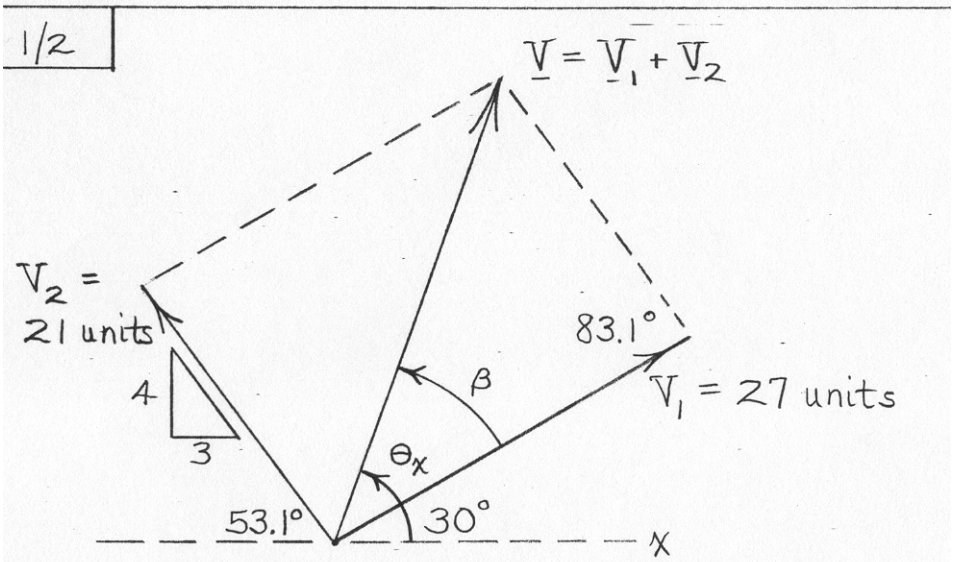
1/2



Graphically, $V = \underline{32 \text{ units}}$, $\underline{\theta_x = 70°}$

Algebraically, $V^2 = 27^2 + 21^2 - 2(27)(21)\cos 83.1°$

$V = \underline{32.2 \text{ units}}$

$\dfrac{\sin\beta}{21} = \dfrac{\sin 83.1°}{32.2}$, $\beta = 40.4°$

$\theta_x = \beta + 30° = 40.4° + 30° = \underline{70.4°}$