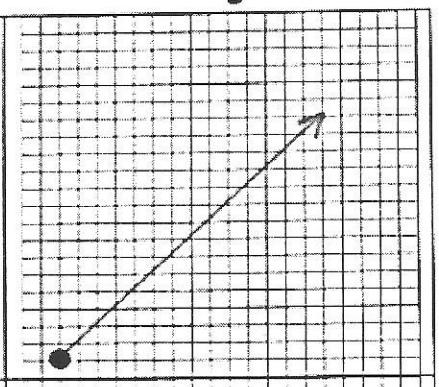
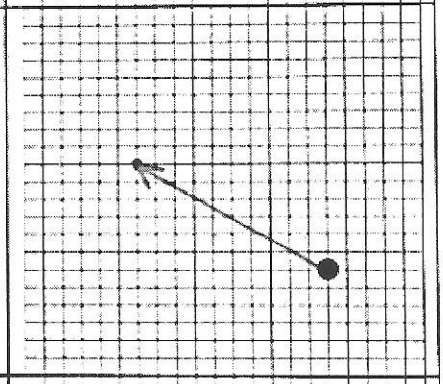
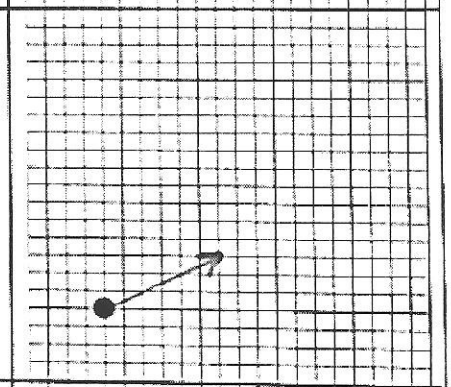
Name KEY Period_____ Date_____

$$\langle \underbrace{|v|\cos\theta}_{X}, \underbrace{|v|\sin\theta}_{Y} \rangle$$

Find the component form and draw each vector. Round to the nearest whole number. Show work!

Given	Component Form	Drawing
1) Magnitude $\lvert u\rvert = 20$ Angle $\theta = 45°$	$\lvert u\rvert\cos\theta$ $\lvert u\rvert\sin\theta$ $20\cos 45°$ $20\sin 45°$ 14 14 $\langle 14, 14 \rangle$	
2) Magnitude $\lvert v\rvert = 11$ Angle $\theta = 150°$	$\lvert v\rvert\cos\theta$ $\lvert v\rvert\sin\theta$ $11\cos 150°$ $11\sin 150°$ -9.5 5.5 -10 6 $\langle -10, 6 \rangle$	
3) Magnitude $\lvert u\rvert = 7$ Angle $\theta = 25°$	$\lvert u\rvert\cos\theta$ $\lvert u\rvert\sin\theta$ $7\cos 25°$ $7\sin 25°$ 6.3 2.9 6 3 $\langle 6, 3 \rangle$	
4) Magnitude $\lvert v\rvert = 9$ Angle $\theta = 120°$	$\lvert v\rvert\cos\theta$ $\lvert v\rvert\sin\theta$ $9\cos 120°$ $9\sin 120°$ -4.5 7.7 -5 8 $\langle -5, 8 \rangle$