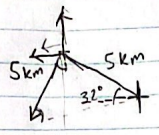
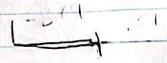


y 5 sin 32 = 2.64
x 5 cos 32 = -4.24

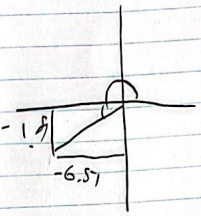
y 5 cos 27 = -4.45
x 5 sin 27 = -2.27

2.64↑ - 4.24→
+ -2.27↑ - 4.45→
0.37↑ - 8.69→



$\sqrt{(-6.51)^2 + (-1.81)^2} = 6.75$

$\tan^{-1}\left(\frac{-1.81}{-6.51}\right) =$



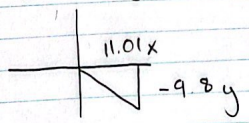
2) a (3.7î - 6.0ĵ) magnitude = 14.7 lb.

b (-7.3î + 3.8ĵ)

11.01î - 9.8ĵ
x y

$\tan^{-1}(-9.8/11.01) =$

318.3 deg



3) A (3.7î - 6.0ĵ)
B (-7.3î + 3.8ĵ)

magnitude = 14.7.

$\sqrt{(-11.01)^2 + (9.8)^2}$

-11.01 9.8 y

$\tan^{-1}\left(\frac{9.8}{-11.01}\right) = -41.6.$