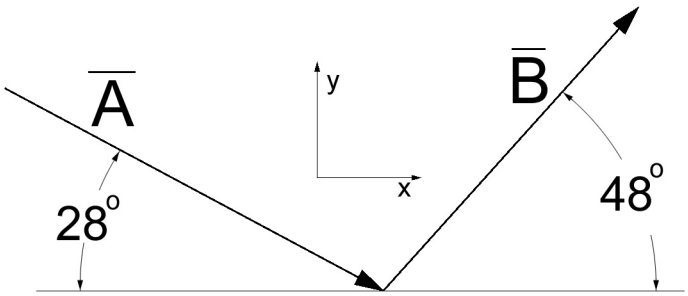
ES201 Pop Quiz #1 Solution Name: Solution



Find the x and y components of the sum of the forces A (674 N) and B (598 N).

$\overline{\mathsf{A}}$: 674N $cos(-28°)\hat{\imath}$ + 674N $sin(-28°)\hat{\jmath}$

$\overline{\mathsf{B}}$: 598N $cos(48°)\hat{\imath}$ + 598N $sin(48°)\hat{\jmath}$

in x: 674N $cos(-28°)$ + 598N $cos(48°)$ = 995 N in x

in y: 674N $sin(-28°)$ + 598N $sin(48°)$ = 128 N in y