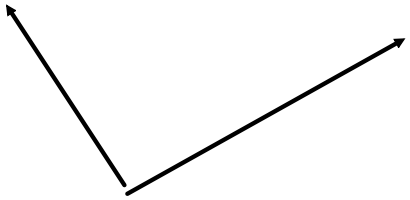
$F_1 = 85$ N at 33°
$F_2 = 57$ N at 120°

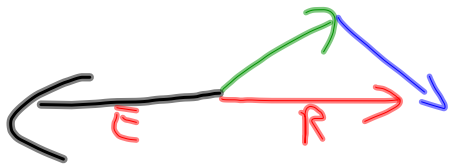


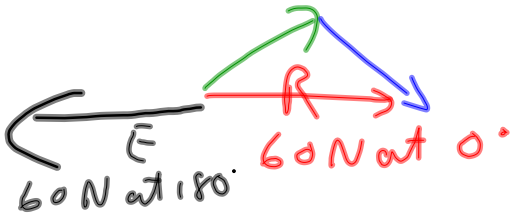
Oct 7-7:58 AM

Σ equilibrant

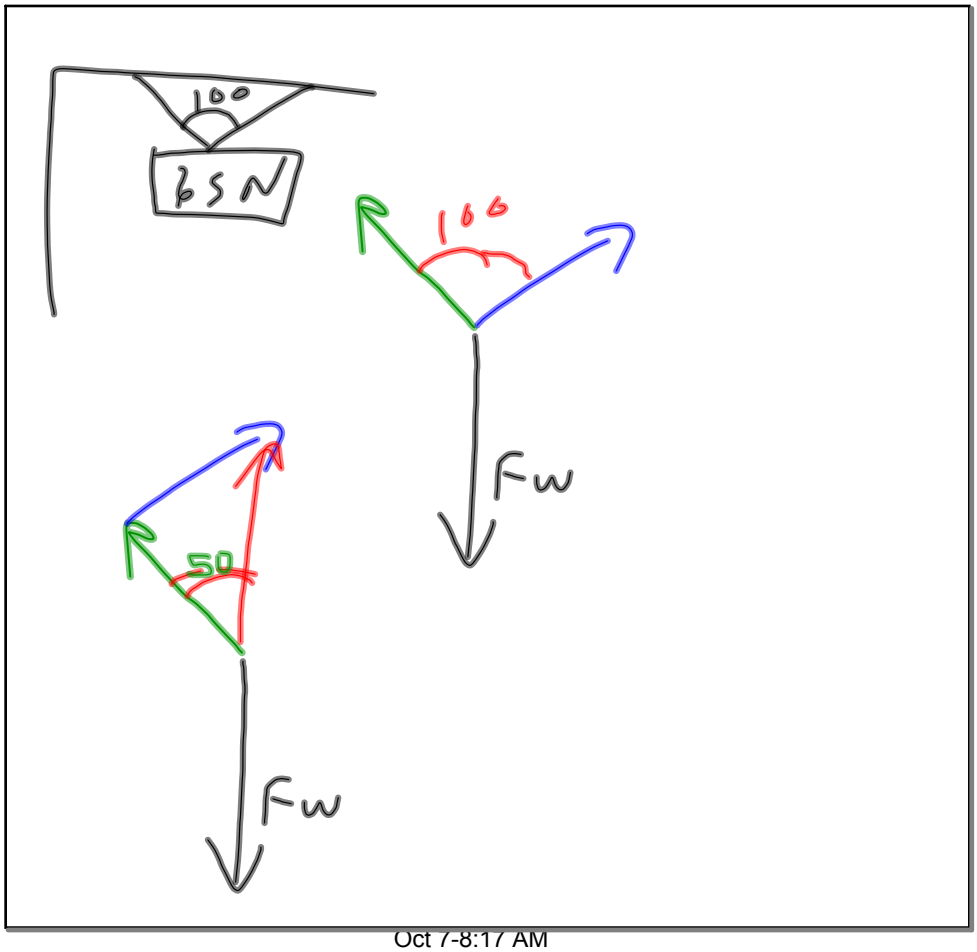
$\bar{E} = -\bar{R}$

opposite 180





Oct 7-8:11 AM



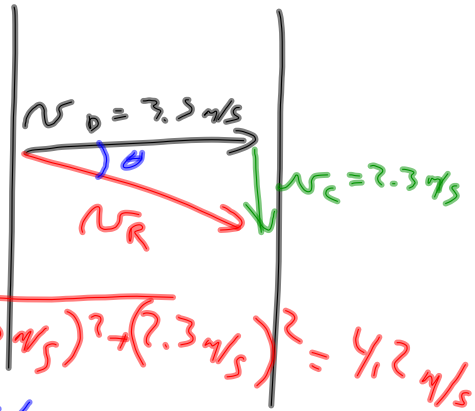
Oct 7-8:17 AM

A boat traveling at 3.5 m/s heads across stream. Where does the boat end up if the current is at 2.3 m/s?

$v_b = 3.5$ m/s

$v_c = 2.3$ m/s

$v_R = ?$



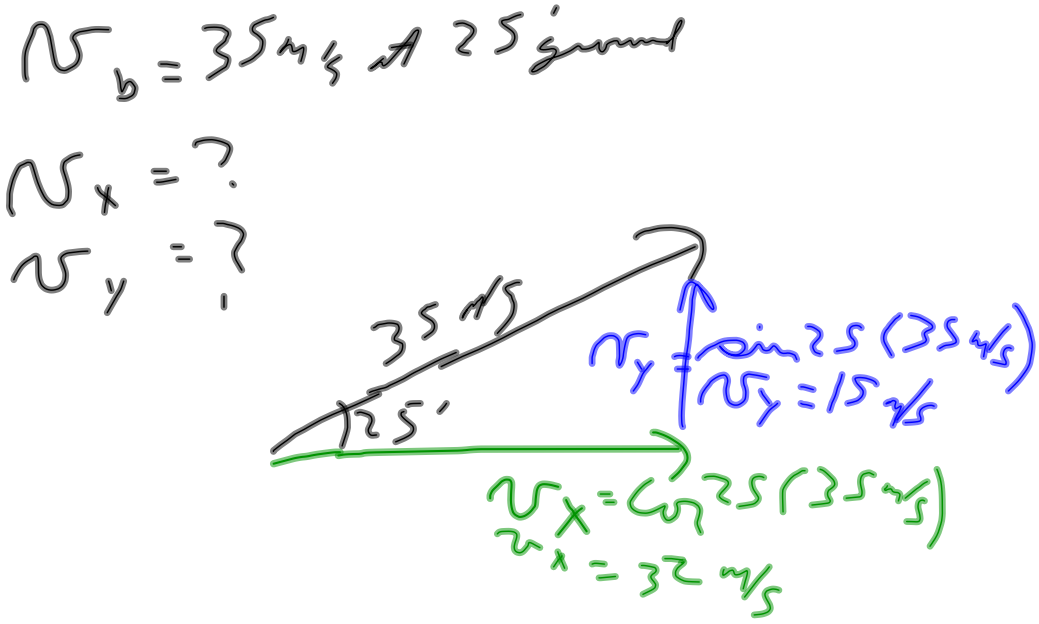
$v_R = \sqrt{(3.5\ m/s)^2 + (2.3\ m/s)^2} = 4.2$ m/s

$\tan\theta = \frac{2.3\ m/s}{3.5\ m/s} = 33°$

$v_R = 4.2$ m/s at 33° downstream

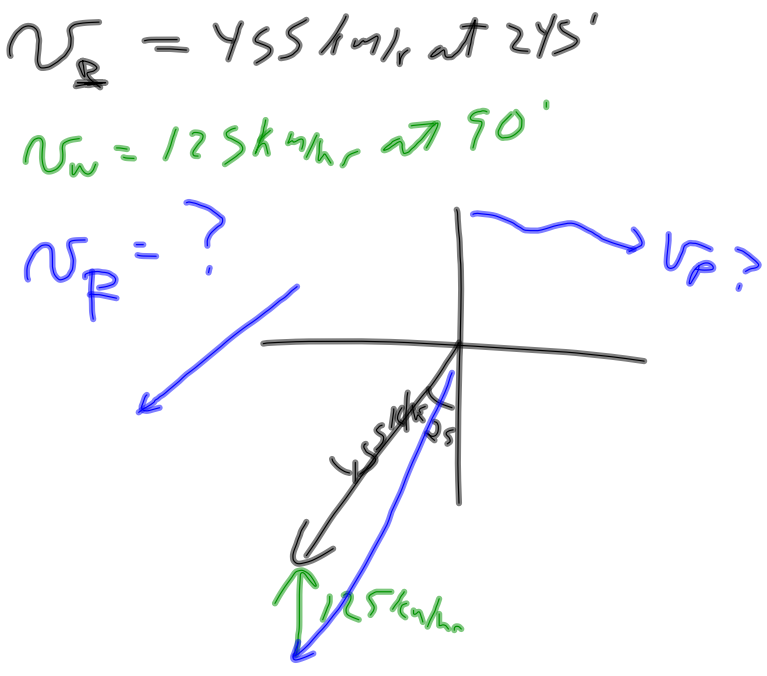
Oct 7-7:06 AM

A ball is kicked at 35 m/s at an angle of 25° with the horizontal.What are the horizontal and vertical components of the velocity?



Oct 7-7:07 AM

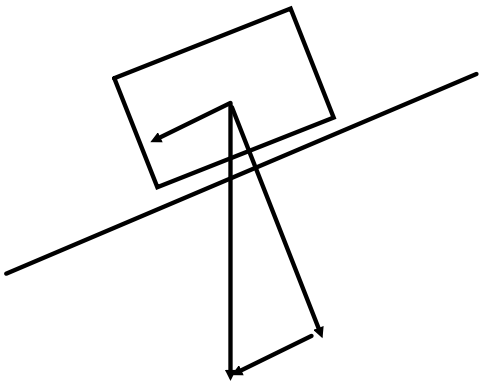
A plane (billy the plane, that is) wants to travel at 455 km/hr at 245'. Where should it head if it encounters a wind of 125 km/hr blowing from the South?



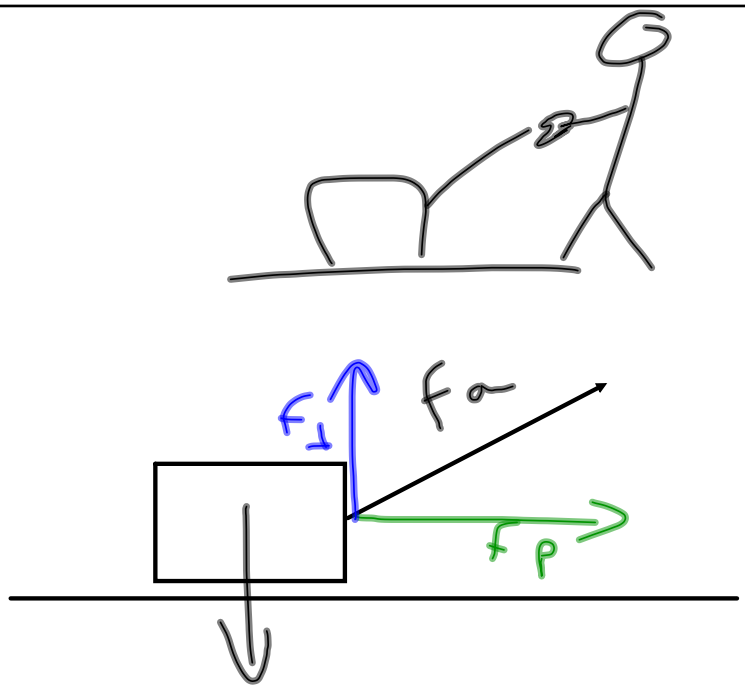
Oct 7-7:05 AM

a) A plane heads due east (180 ^{o}) at 425 km/hr. Where does the plane end up if it encounters a wind blowing at 75 km/hr from the southeast (135 ^{o})?….b) Where should the plane head if it wants to end up going due east?

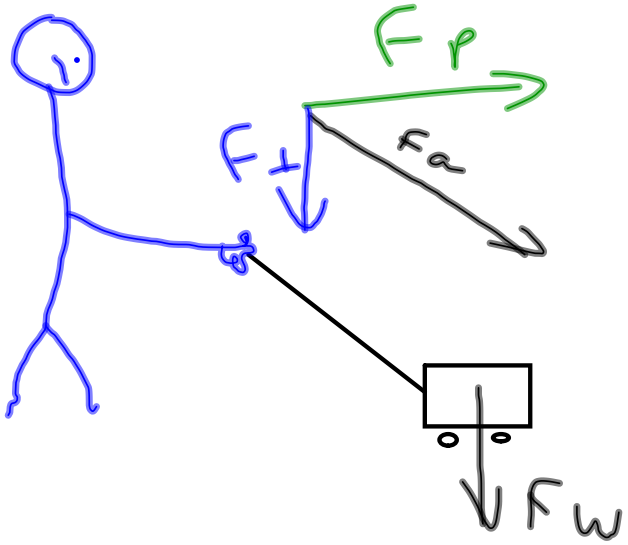
Oct 7-7:08 AM



Oct 7-8:02 AM



Oct 7-8:05 AM



Oct 7-8:07 AM