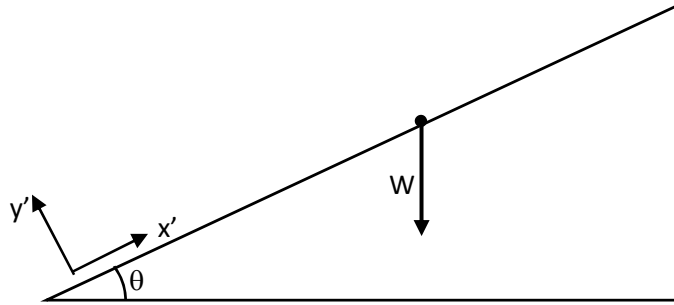
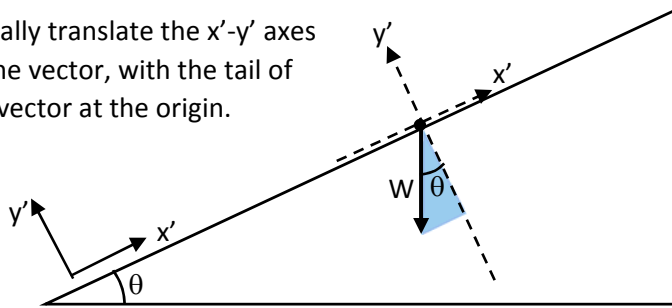


Resolve W into x' and y' components. In general, the alphabet or number next to an "arrow" is the *magnitude* of that vector (like the W in the present case).



What you need to do:

Visually translate the x' - y' axes to the vector, with the tail of the vector at the origin.

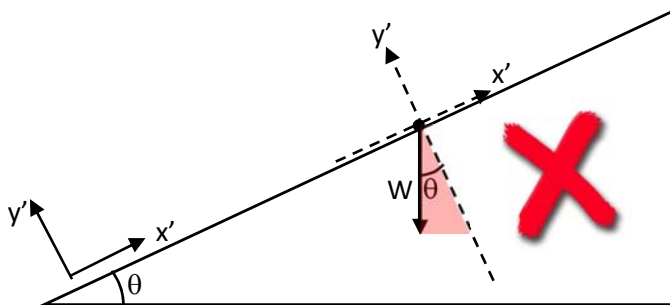


$$W_{x'} = -W \sin \theta$$

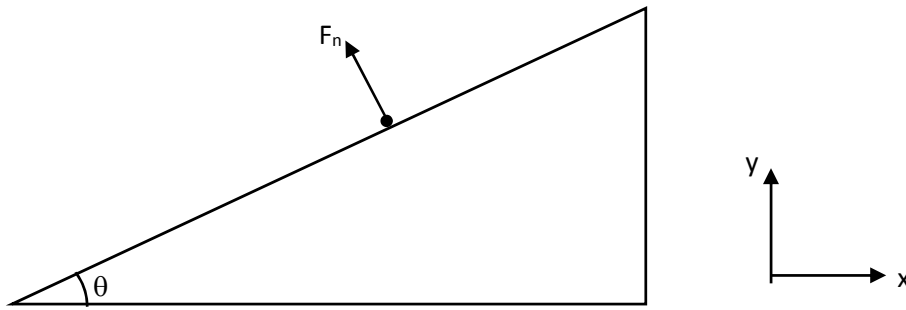
$$W_{y'} = -W \cos \theta$$

Both W_x and W_y are negative because the vector is pointing into the third quadrant of this particular coordinate system.

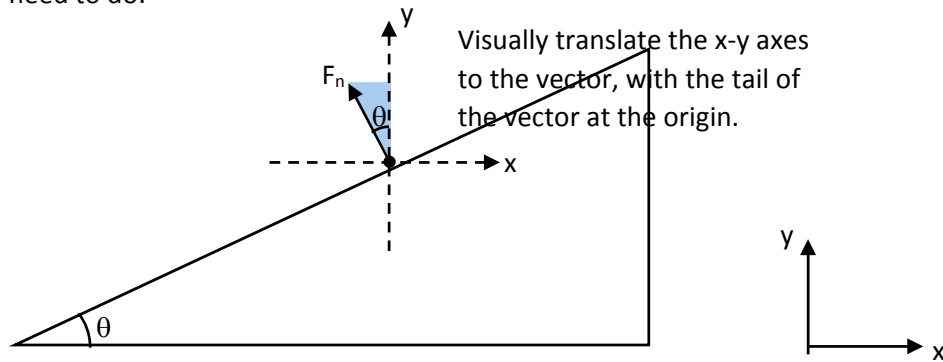
Note that the vector has to be aligned with the hypotenuse of the blue triangle, so the following is wrong:



Resolve F_n into x and y components.



What you need to do:



Visually translate the x-y axes to the vector, with the tail of the vector at the origin.

$$(F_n)_x = -F_n \sin \theta$$

$$(F_n)_y = F_n \cos \theta$$

Note that the vector has to be aligned with the hypotenuse of the blue triangle, so the following is wrong:

