

1. You are setting your slope equal to the unit on your vertical-axis instead of the constant m_s . I think what is confusing you on that is that in this lab we have ' m ' that represents 'mass' and ' m_s ' that represents the slope. Even so, you are making the correct substitution when you use the slope value in your line function.
 - a. Both sides of every equation should have the same units. If there is a value whose units we don't know we can often use this fact to deduce what they should be.
2. I would plug in the unit values that attached to your points at this step and see what happens to your final answer if there are there the whole time.
3. All of the values on the RHS of this equation should units. Each term (portion separated by addition or subtraction) should have the same units as each other. If the components of that section don't have the same units then portions of them should cancel out so that they are the same at the end.
 - a. We can use this as a sanity check on our math because it doesn't make sense to add together a mass and an acceleration, but if we multiply them together we can get a value that represents something else.
4. At the point where you subbed in your values one of your multiplications became a subtraction. This is the math error that I mentioned fixing to get an answer that makes more sense.

$$y = m_s \times x + b$$

$$y - m_s \times x = b$$

$$b = y - m_s \times x$$

$$b = (65_) - \left(1.8 \frac{s^2}{kg}\right) - (30_)$$

5. You have the units for your slope attached to the constant ' m '. You are correct that the value that goes there will have the units that you calculated in the slope portion, the units are attached to the number value so we don't usually write them in until we are subbing in our values. (I would not have taken points off for this on this lab since I had not mentioned it explicitly).
6. Did you do the q calculations on a different page? If so I would like to see them as well as the one for #3 is a bit tricky