Will Legg

02-15-2024

REFLECTION PROMPT:

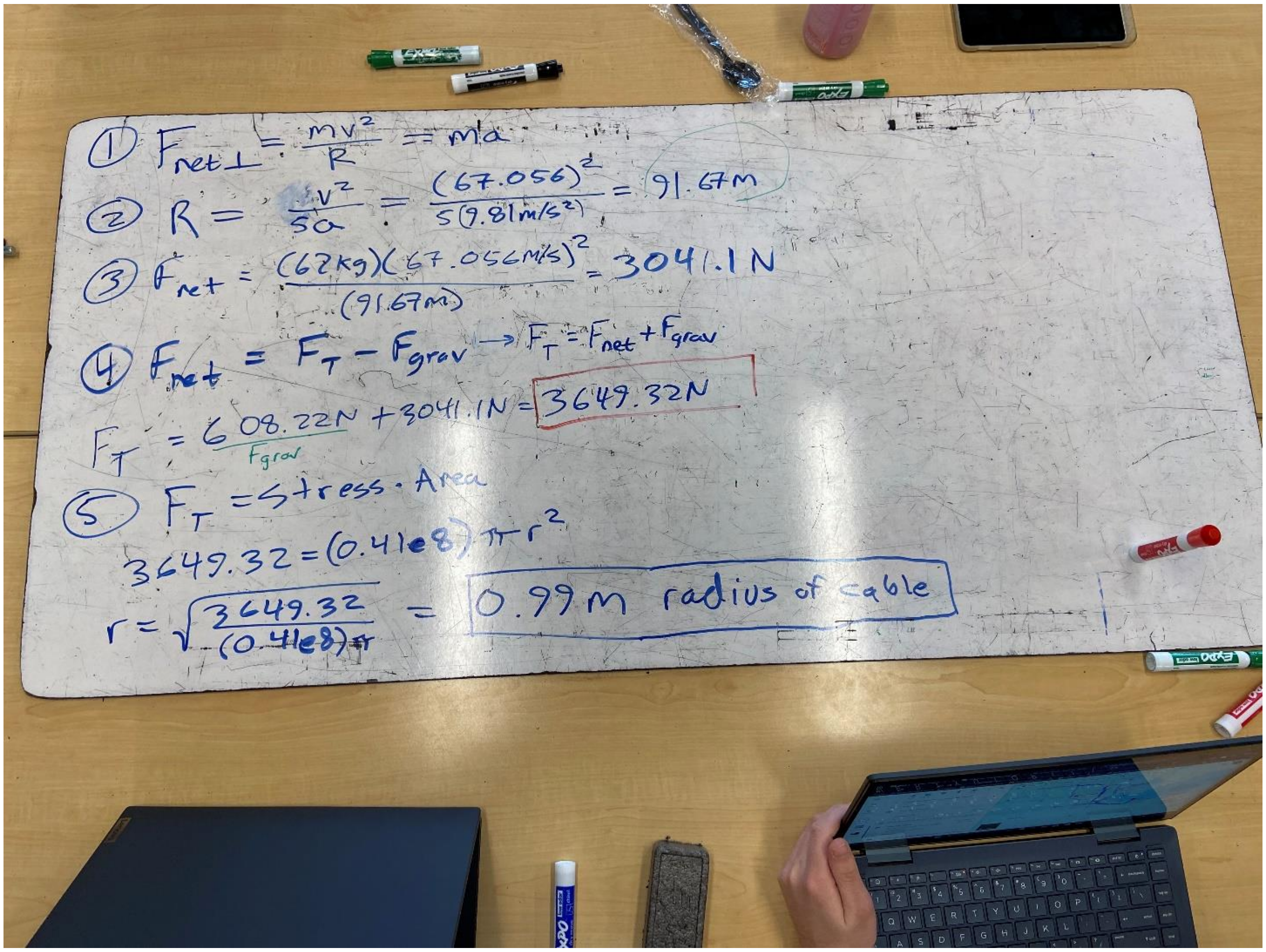
Reflecting on this week in class, were you able to improve on what you said last week? Why or why not? This week in class our group focused on our process and sharing our work. Given the feedback we received, we broke up into separate roles while writing our white board four quadrants, with each member writing at least one quadrant. We also decided from the feedback that it would help to number our plan and have the corresponding numbers to represent our problem solving process. I felt that these implementations helped the legibility of our work and helped us all get equally involved.

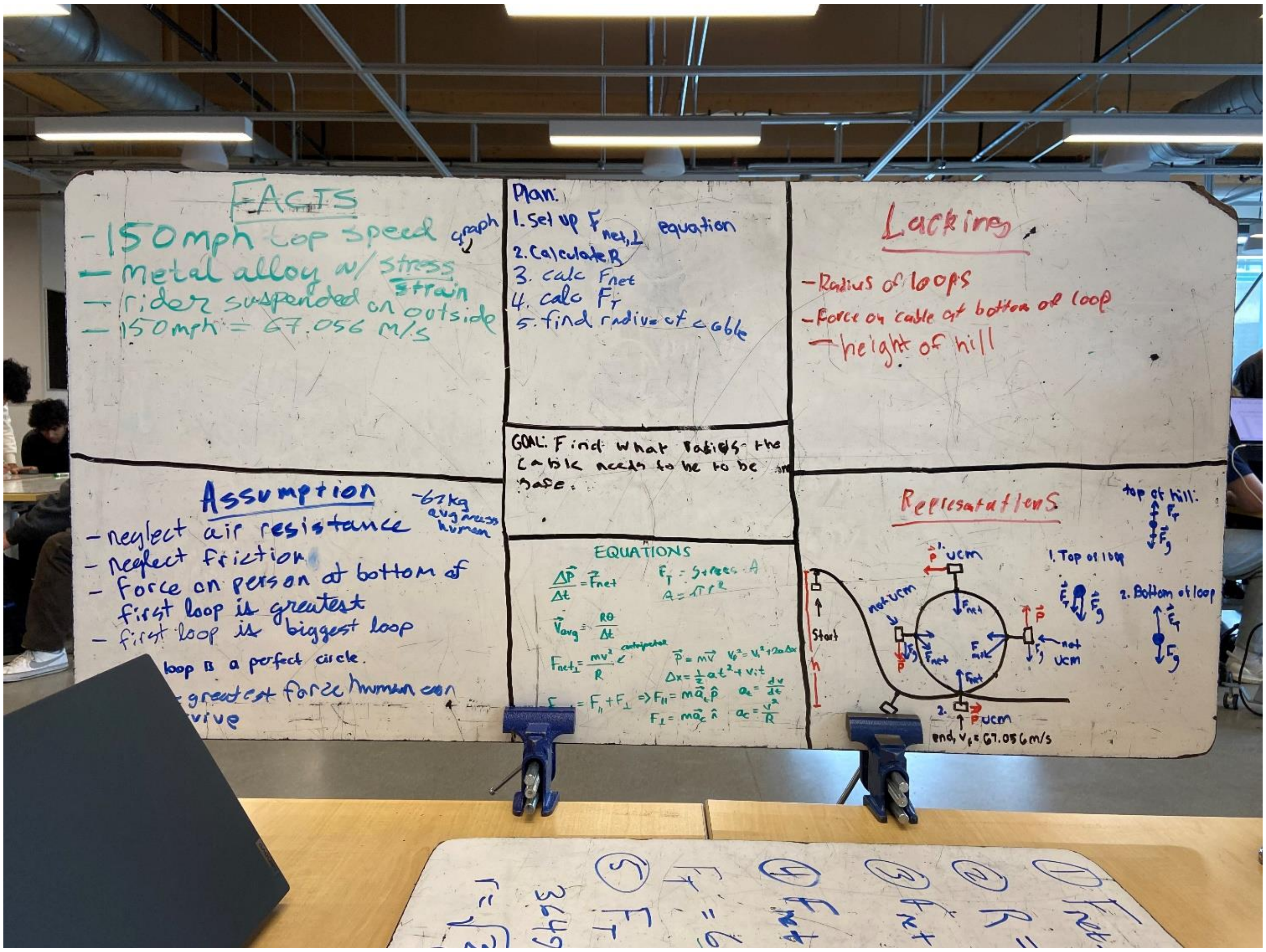
What went well this week? Be specific and include supporting examples from this week's class.
I feel that the way that we develop our four quadrants and also include a section for relevant equations really helps us find a good starting point to begin solving the equation. The development of a plan on our four quadrant board really helped to keep us on track and I felt that it made our steps apparent. Separating our work up into separate roles made sure that everyone was equally involved.

What area(s) could you improve on for next week related to in class and how might you work to improve those next week? Last week, in our representation we had labeled parts that we were solving for and I think it really synced our solving process together but we didn't carry that through to this week. I feel there are also some places where we could have been a bit more descriptive. I generally like our process though and I think it's good for quickly finding our desired solutions.

What strategies might you try to improve next week?
Next week I'd like to continue using our four quadrants with the included equation space, plan, and goal sections because I think they're nice tools to help us all in getting started into the problem solving mindset. It also helps us identify the relevant parts that we're given and how we can best utilize them and get's our whole group on the same page with regard to what our goal should be and what we're solving for. I'd like to try to have a clear and simple representation for next week with some clear variables attached from our solving process, as I mentioned earlier.

PASTE IMAGES OF YOUR THURSDAY WHITEBOARDS HERE:




FACTS
-150mph top speed
graph
- metal alloy w/ stress / strain
- rider suspended on outside
- 150mph = 67.056 m/s
Plan:
1. Set up F net,⊥ equation
2. Calculate R
3. calc Fnet
4. calc FT
5. find radius of cable
Lacking
- Radius of loops
- Force on cable at bottom of loop
- height of hill
Assumption
- 62kg avg mass human
- neglect air resistance
- neglect friction
- Force on person at bottom of first loop is greatest
- first loop is biggest loop
- loop B a perfect circle.
GOAL: Find what radius the cable needs to be to be safe.
EQUATIONS
Representations
top of hill:
1. Top of loop
2. Bottom of loop
Start
end, vf = 67.056 m/s