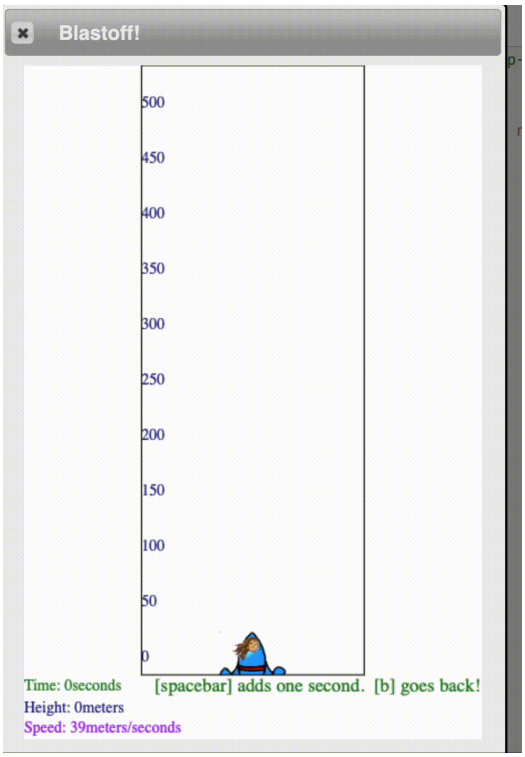
Precal Pyret Pset: Rocket Height
16 December 2021

Do your work on loose leaf!
Turn in at the end of the period!

Work with your partner to answer the questions below on a sheet of loose leaf. Be prepared to share out at the end of class! You'll be turning the sheet of paper in.



1. You want your rocket to reach its maximum hight after exactly 400 meters and then land after 40 sec.

    A. Sketch a graph of this situation by hand. Identify the family of this function, its other properties, and how it is transformed from its parent (this is review from yesterday's do now).
    B. Use this information to find the function $h(t)$.
    C. Model your function in Pyret. Explain whether it behaves as expected. If it doesn't, figure out what you did wrong and try again!

2. Make the rocket reach its maximum height in exactly 15 sec. and then land. Sketch the graph, identify its properties, and write the function in your notebook. Then model it in Pyret to test if the function works as expected. If it does not go over your notes and figure out what you did wrong!