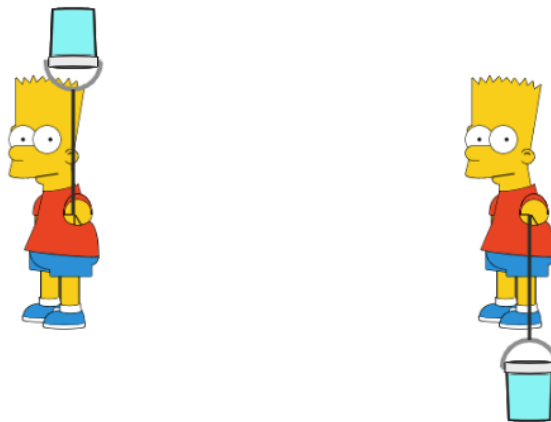


# Ice Bucket Challenge

Step 1: Below is a picture of the bucket in a random location. Fill into this picture the important details about your problem. That is, the mass of the bucket, the radius of the circle and the strength of the rope.



Step 2: Draw in the forces on the bucket at the two key locations.



Step 3: Find the minimum speed for the circular motion when the bucket is at the top so that water remains in its circular path. Then find the maximum speed for the circular motion when the bucket is at the bottom so the rope doesn't snap. Show all your work and then put the answers into the program to see if you did everything properly.