Assignment 5
Sobia Zahid

1. R1: (.2*2/3) + (.3*2/5) + (.5*2/2) = 0.13333+0.12+0.5 = 0.753 hours
   R2: (.4*1.8/3) + (.2*1.8/5) + (.4*1.8/2) = 0.24+0.072+0.36 = 0.672 hours
   R3: (.5*3.1/3) + (.4*3.1/5) + (.1*3.1/2) = .5166+.248+.155 = 0.9197 hours
   We should pick route 2

   R1: 0.753 + (0.30*0.75) = 0.978 hours
   R2: 0.672 + (0.60*1) = 1.272 hours
   With this additional information, we should now pick route 1

Yes, knowing whether or not route 3 is smooth is helpful because it could be the shortest path in the case of there being obstacles on the other two routes. If we know route 3 is smooth, it would only take a bit more than half an hour to get through it which is faster than routes 1 and 2 even without obstacles. If figuring out this information takes a while, it may not be worth it to wait. I'd say half an hour of waiting could be justified but anything more than that would not be of value as an alternative route may have to be taken if it turns out to be sandy or rocky.

ChatGPT seemed to do the math incorrectly for determining the time for each route, but it still ended up getting the right outcome for the first part. For the second, it claimed that route 2 is still the one we should go with. It also concluded that waiting for the information about route 3 depends on how much time is required and that it may be best to pick one of the others.