Final Test Scenario

Directional Step #	Units to Travel	Travel Direction	Number of people	Wind Force	Wind Direction	Unit Time (min)	People Time (min)	Wind Time (min)	Total Time (min)	Accum. Time (min)	Accum. Distance (km)
1	6	East	1	0	NA	60	6	0	66	66	12
2	6	South	3	1	South	60	18	-18	60	126	24
3	2	West	3	3	East	20	6	12	38	164	28
4	2	North	2	2	West	20	4	2	26	190	32
5	3	West	1	3	West	30	3	-27	6	196	38
6	4	North	3	2	North	40	12	-24	28	224	46

```
float travelTime, distance, windForce, numPeople, timeFactor = 1.0,
travelTimeHours, travelTimeMinutes, averageMinutes, accMinutes, accDistance
char travelDirection, windDirection

do{
  get distance, travelDirection, windDirection, windForce, numPeople from user

  travelTime = distance*5     //calculate time with just distance
  timeFactor += numPeople*0.1   //update time factor based on number of people
  //update time factor based on direction
  //figure out timeFactor based on given wind directions
  if travelDirection = north || south
    if windDirection = east || west
      timeFactor += windForce*0.05
    if travelDirection = north
      if windDirection = south
        timeFactor += windForce*0.2
      if windDirection = North
        timeFactor += windForce*-0.3
    if travelDirection = south
      if windDirection = north
        timeFactor += windForce*0.2
      if windDirection = south
        timeFactor += windForce*-0.3

  if travelDirection = east || west
    if windDirection = north || south
      timeFactor += windForce*0.05
    if travelDirection = east
      if windDirection = west
        timeFactor += windForce*0.2
      if windDirection = east
        timeFactor += windForce*-0.3
    if travelDirection = west
      if windDirection = east
        timeFactor += windForce*0.2
      if windDirection = west
        timeFactor += windForce*-0.3

  travelTime = travelTime*timeFactor
  accMinutes += travelTime
  accDistance += distance
}while (user takes input, repeat)

//converts to HH:MM
travelTimeMinutes = rounded(accMinutes%60)
travelTimeHours = ((accMinutes-travelTimeMinutes)/60)
print travelTimeHours:travelTimeMinutes

//calculates average minutes per km
averageMinutes = travelTime/accDistance
```