**Assignment Acceleration Questions**

**Be sure to show full solutions, with a conclusion and units on your final answer.**

1. Write out the formulas for acceleration. (5 marks)
2. Riley is driving a really cool physics car. He travels from rest to a velocity of 80 km/h [W] in 10.5 seconds. Find Riley’s acceleration? (Remember all velocities have to be in m/s). (4 marks)
3. Kaitlyn is flying in a plane that is travelling at 125 km/h [S] when it turns to a velocity of

125 km/h [N] in a time of 34 seconds. Determine the acceleration of this maneuver. (Remember direction is important) (4 marks)

1. Mitch is travelling with an acceleration of 10 m/s2 [N] when he comes to a stop from a speed of 25 m/s [S]. What is the time it takes Mitch to stop? What is his displacement? (4 marks)
2. Isabella starts running at a velocity of 3 m/s [N] when she starts to accelerate at 1.5 m/s2 [N] for

6 seconds. What displacement does Isabella travel? (4 marks)

1. Ethan is pushing Zachary in his socks across a slippery floor. If he pushes for 5.4 s from rest and Ethan pushes for a distance of 20 m [forward], what is Zachary’s acceleration? (4 marks)
2. Pg 73 # 68