Unit 4 - Module 2 and 3 - Vehicle Dynamics and EV Subsystems

Week 3 - Assignment 2.5

The due date for submitting this assignment has passed.
As per our records you have not submitted this assignment.

Prepare a spreadsheet for 2 wheelers ICE using data in slide 10. Use this spreadsheet to obtain the traction Force, traction Power, and the torque required every second. 

Now answer the below questions (Assume R=6.3)

1) Compute the total energy consumed (in Wh, correct up to 2 decimal places)

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Answer Range) 9.12

2) Compute the distance traveled (in m, correct up to 2 decimal places)

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Answer Range) 55.67

3) Compute the Wh/km for the vehicle (correct up to 2 decimal places)

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Answer Range) 13.5, 15.46

Now assume that at 100 seconds in the drive cycle, the vehicle moves at constant speed, but climbs a slope of 5° for 10 seconds. The vehicle then goes to zero speed in the next eight second, just like it does from 100 sec to 108 sec in IDC. Assuming R=6.3,

4) Compute the energy required (in Wh, correct up to 2 decimal places)

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Answer Range) 11.92

5) Compute the distance travelled by the vehicle (in m, correct up to 2 decimal places)

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Answer Range) 66.76

6) Compute the Wh/km for the vehicle (correct up to 2 decimal places)

No, the answer is incorrect.
Score: 0
Accepted Answers:
(Answer Range) 15.8, 16.9

Due on 2020-10-07, 23:59 IST.