**Accounting for extra inertia/weight**

**Known:**

**Solving and graphing:**

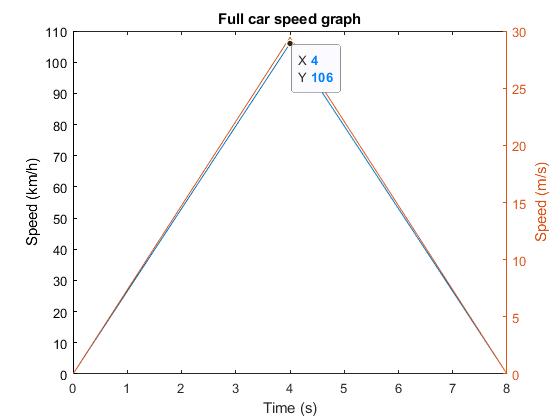
Speed, Torque, Power

**Solving for:**

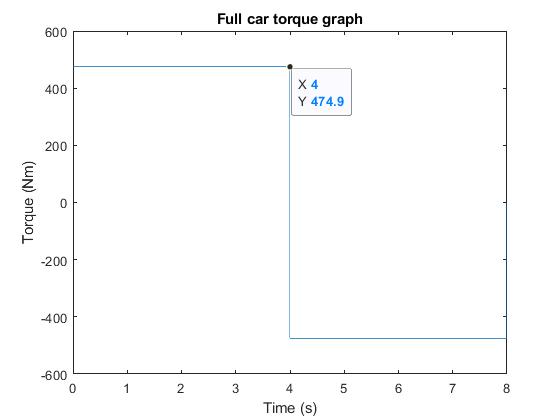
Full Car, Wheel, Motor

**Full Car**

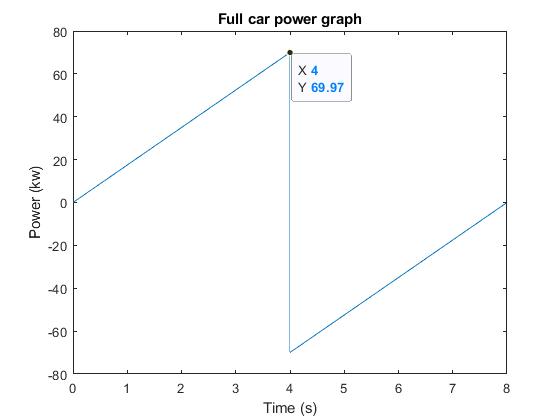
**Speed graph**



**Torque graph**



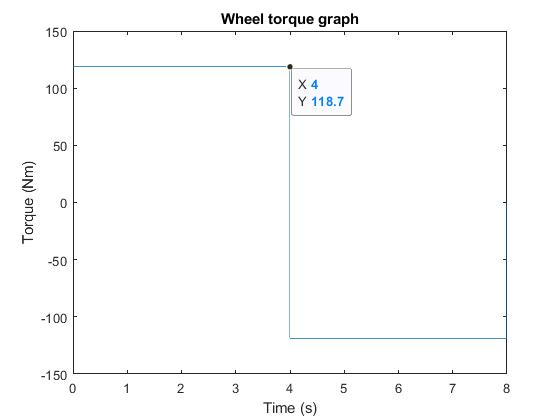
**Power graph**



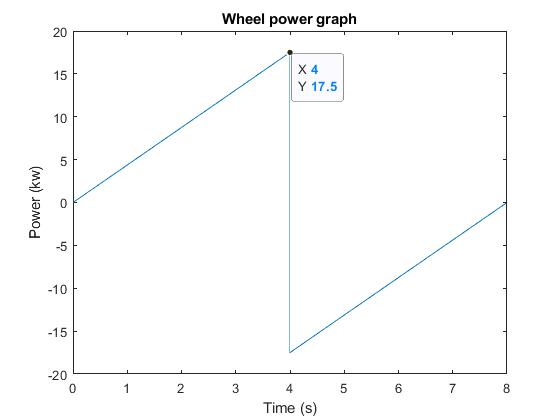
**Wheel**

Does not changes

**Torque graph**



**Power graph**



**Motor**

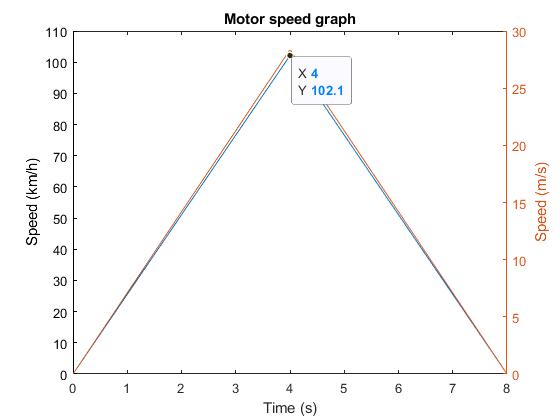
Does not changes

The power does not change (Assume perfect system)

From the datasheet. For the given power, torque is ,

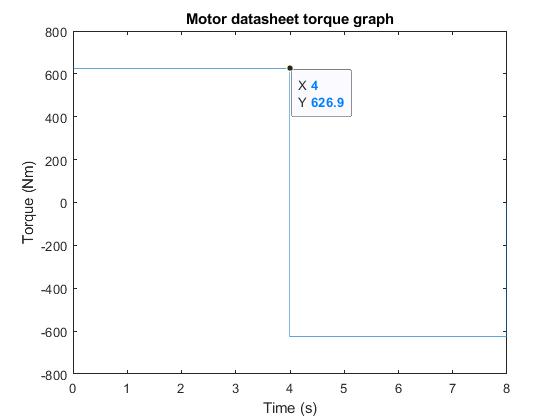
**Speed graph**

@ 6000 RPM (maximum), speed of the motor = 102.14

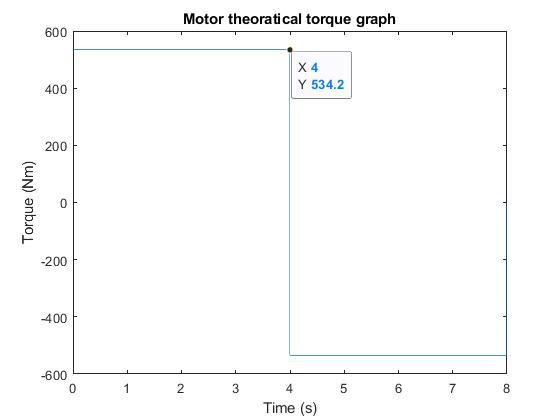


**Torque graph**

Torque value from datasheet



Torque value from calculations



**Power graph**

