Assignment 7

The due date for submitting this assignment has passed. For details, please refer to the course syllabus.

1. The equation for calculating the first gear in a multipled gearboxes is obtained from the equation of
   1.25

2. The equation for calculating the highest gear in a multipled gearboxes is obtained from the equation of
   0.25

Questions 4-7

4. A vehicle weighing 10 lb needs to be equipped with a planetary gearset. The engine develops a maximum torque of 150 ft-lbs. This
   vehicle should then have a maximum speed of 60 mph when the engine is running at 3000 rpm. The vehicle should have a maximum
   speed of 60 mph at an engine speed of 3000 rpm. The engine should have a maximum speed of 3000 rpm.
   4.16

5. The ratio of the first gear ratio is
   2.5

6. The ratio of the second gear ratio is
   1.6

7. The ratio of the third gear ratio is
   1.4

Questions 8-11

8. The ratio of the first gear ratio is
   1.5

9. The ratio of the second gear ratio is
   1.4

10. The ratio of the third gear ratio is
    1.2

11. The ratio of the fourth gear ratio is
    1.1