

Automotive Engines 10th

Chapter 11 Gasoline, Alternative Fuels, and Diesel Fuels

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

1. What other gases are often mixed with propane?
2. What is the difference between summer-blend and winter-blend gasoline?
3. How is a flexible fuel vehicle identified?
4. What is Reid vapor pressure?
5. Why is it desirable to fill a compressed natural gas (CNG) vehicle with the highest pressure available?
6. What is stoichiometry?
7. What does the $(R + M) \div 2$ gasoline pump octane rating indicate?

Answer Key

Testname: ENGINES 10 SHORT11

1. Gases often mixed with propane include: butane, propylene, butylene, mercaptan (to add smell).
Page Ref: 130
2. Winter blend gasoline has a higher RVP rating to allow engines to start when cold. Summer blend gasoline has a lower RVP rating to help prevent vapor-related problem in hot weather.
Page Ref: 120
3. A flex fuel vehicle can be identified by:
 1. Emblems on the vehicle
 2. Yellow fuel cap
 3. Vehicle identification number (VIN)Page Ref: 129
4. RVP is the vapor pressure measured above a fuel sample at exactly 100°F.
Page Ref: 120
5. The higher the pressure is, the more fuel that is added to the tank and the greater the range of the vehicle.
Page Ref: 132
6. Stoichiometric is the air-fuel ratio where all of the fuel mixes with all of the oxygen in the air and burns completely.
Page Ref: 121
7. The octane rating indicates the average of the research (R) and motor (M) method octane ratings and what is posted on the gasoline pumps.
Page Ref: 122