

Name _____

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

- 1) Technician A says a final drive ratio is a compromise between performance and vehicle speed. Technician B says a final drive ratio that provides a lesser top vehicle speed also provides for slower acceleration. Which technician is correct? 1) _____
A) Technician A only
B) Technician B only
C) Both technicians
D) Neither technician
- 2) The shim used on a drive pinion gear is used to properly position the gear so that it can correctly mesh with the _____. 2) _____
A) ring gear
B) side gear
C) differential pinion gears
D) both B and C
- 3) Two technicians are discussing which lubricants are used in a limited-slip differential. Technician A says to use SAE 80W-140. Technician B says that most vehicle manufacturers usually specify SAE 80W-90 be used with or without special limited-slip additives. Which technician is correct? 3) _____
A) Technician A only
B) Technician B only
C) Both technicians
D) Neither technician
- 4) The backlash is less than specifications (too low). This will cause the ring gear tooth pattern to be too close to the _____. 4) _____
A) heel
B) flank
C) toe
D) face
- 5) Which component allow the rear wheels to turn at different speeds while propelling the vehicle? 5) _____
A) Differential assembly
B) Adjustable shims
C) Axle bearings
D) None of these choices are correct.
- 6) What gears produce the final drive ratio? 6) _____
A) Ring and pinion gear set
B) Spider gears
C) Countershaft gears
D) None of the above is correct.

- 7) Technician A says that the convex side of the ring gear is the drive side on most rear axle assemblies. Technician B says that the convex side of the ring gear is the drive side on differentials used in the front of many four-wheel-drive vehicles. Which technician is correct? 7) _____
- A) Technician A only
 - B) Technician B only
 - C) Both technicians
 - D) Neither technician
- 8) The backlash exceeds specifications. The technician should position the ring gear _____. 8) _____
- A) closer to the drive pinion gear
 - B) further from the drive pinion gear
 - C) toward the heel
 - D) toward the toe
- 9) Technician A says most limited-slip differentials rely on clutches that connect each side gear to the differential case. Technician B says the inward thrust of the side gears increases as wheel slippage increases. Which technician is correct? 9) _____
- A) Technician A only
 - B) Technician B only
 - C) Both technicians
 - D) Neither technicians A nor B
- 10) Where are straight roller bearings used in a rear drive axle? 10) _____
- A) Pinion bearings
 - B) Spider gear bearings
 - C) Ring gear bearings
 - D) Axle bearings