

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

## Answer Key

Testname: AT6\_130B

- 1) A  
Page Ref: 1629
- 2) A  
Page Ref: 1638
- 3) B  
Page Ref: 1642
- 4) C  
Page Ref: 1637
- 5) A  
Page Ref: 1627
- 6) A  
Page Ref: 1629
- 7) A  
Page Ref: 1637
- 8) A  
Page Ref: 1641
- 9) A  
Page Ref: 1630
- 10) D  
Page Ref: 1634