

PRACTICE EXAM 6: ASE A3 SIMULATION (50 QUESTIONS)

50 Questions • 60-Minute Time Limit

1. The primary purpose of the clutch in a manual drive train is to:
 - A. Multiply engine torque before it reaches the transmission gears
 - B. Change the gear ratio between the engine and the drive wheels
 - C. Connect and disconnect engine power to the transmission smoothly
 - D. Maintain a constant input shaft speed during all gear changes

2. Which component applies the clamping force that holds the clutch disc against the flywheel?
 - A. The pressure plate diaphragm spring assembly
 - B. The release (throw-out) bearing during operation
 - C. The pilot bearing in the crankshaft end bore
 - D. The clutch fork pivoting on its mounting ball

3. All of the following can cause a clutch to slip EXCEPT:
 - A. Oil or grease contamination on the friction disc facings
 - B. A worn clutch disc with the friction material near its limit
 - C. A weak or broken pressure plate diaphragm spring
 - D. A worn pilot bearing supporting the input shaft tip

4. The release bearing in a clutch assembly is responsible for:
- A. Holding the clutch disc against the flywheel friction surface
 - B. Transferring pedal motion to the rotating pressure plate fingers
 - C. Supporting the rear of the engine crankshaft during operation
 - D. Dampening torsional vibration between the engine and gearbox
5. A clutch disc uses torsional coil springs in its hub primarily to:
- A. Absorb driveline shock and dampen torsional vibration
 - B. Increase the clamping force applied by the pressure plate
 - C. Center the disc on the flywheel during clutch engagement
 - D. Provide a friction surface for the release bearing to ride on
6. Which of the following is the LEAST likely cause of a clutch pedal that is hard to depress?
- A. A binding or corroded clutch cable inside its housing
 - B. A dry or seized clutch release fork pivot point
 - C. Air trapped inside the hydraulic clutch release circuit
 - D. A pressure plate with a higher-than-specified clamping load
7. A concentric (hydraulic) slave cylinder differs from an external slave cylinder in that it:
- A. Is mounted outside the bell housing on the transmission case
 - B. Surrounds the input shaft and acts directly on the release bearing
 - C. Uses a mechanical cable instead of hydraulic fluid pressure
 - D. Requires no bleeding because it is a sealed lifetime unit

8. Before removing a transmission to service a clutch, the technician should:

- A. Drain the engine oil to prevent spillage during removal
- B. Remove the flywheel to access the clutch from the front
- C. Disconnect the battery and bleed the cooling system first
- D. Support the engine and mark the driveshaft and linkage positions

9. The purpose of a synchronizer in a manual transmission is to:

- A. Lock the output shaft to prevent the vehicle from rolling
- B. Multiply engine torque in the lower gear ranges only
- C. Match the speed of the gear and shaft before engagement
- D. Lubricate the gear teeth during high-speed operation

10. In a typical manual transmission, the countershaft (cluster gear) is driven by the:

- A. Input shaft gear when the clutch is engaged
- B. Output shaft through the speedometer drive gear
- C. Reverse idler gear during forward operation only
- D. Shift fork acting on the synchronizer sleeve

11. A transmission in "direct drive" (typically fourth gear) has a gear ratio of:

- A. Approximately 2 to 1 for maximum torque output
- B. 1 to 1 with the input and output shafts locked together
- C. An overdrive ratio below 1 to 1 for fuel economy
- D. A reverse ratio that turns the output shaft backward

12. The shift forks in a manual transmission engage with the:

- A. Gear teeth directly to lock the gear to the shaft
- B. Input shaft splines to drive the countershaft cluster
- C. Detent balls to hold the shift rails in their positions
- D. Synchronizer sleeves to move them into engagement

13. An overdrive gear ratio is defined as one in which the:

- A. Output shaft turns faster than the input shaft
- B. Input shaft turns faster than the output shaft
- C. Input and output shafts turn at exactly the same speed
- D. Output shaft reverses direction relative to the input

14. A reverse idler gear in a manual transmission is used to:

- A. Reverse the rotation direction of the output shaft
- B. Synchronize the reverse gear during quick engagement
- C. Multiply torque more than any forward gear can
- D. Reduce gear noise when operating in reverse gear

15. Gear oil specified as GL-5 versus GL-4 generally indicates:

- A. A lower viscosity rating for cold weather operation
- B. A synthetic base stock required for all transmissions
- C. A lighter additive package for brass synchronizer rings
- D. A higher extreme-pressure additive level for heavier loads

16. The main shaft (output shaft) of a manual transmission is supported at the rear by the:

- A. Pilot bearing pressed into the crankshaft end bore
- B. Input shaft bearing on the clutch side of the case
- C. Output shaft bearing in the tailshaft housing
- D. Countershaft bearing at the front of the case

17. Which tool is BEST suited for measuring synchronizer blocking ring wear during a rebuild?

- A. A feeler gauge checking the gap between ring and gear cone
- B. A dial bore gauge measuring the synchronizer hub diameter
- C. A torque wrench checking the shift fork retaining bolts
- D. A micrometer measuring the output shaft journal diameter

18. A "constant-mesh" manual transmission means that:

- A. All gears are engaged with the output shaft at all times
- B. The clutch remains engaged constantly during gear changes
- C. Only one pair of gears can mesh at any given moment
- D. The forward gear pairs are always in mesh and rotate together

19. When diagnosing a transmission noise, road-testing in different gears helps the technician to:

- A. Confirm the clutch pedal free play is within specification
- B. Verify the final drive ratio matches the vehicle's tires
- C. Isolate whether the noise is gear-related or bearing-related
- D. Measure the exact backlash present in each gear set

20. In a transverse-engine FWD vehicle, the transaxle combines the functions of the:

- A. Engine, clutch, and the cooling system in one unit
- B. Transmission, differential, and final drive in one housing
- C. Drive shaft, U-joints, and rear axle in one assembly
- D. Steering rack, transmission, and suspension in one unit

21. The drive axles (half shafts) on a FWD transaxle transmit power from the:

- A. Engine crankshaft directly to the front wheel hubs
- B. Transmission input shaft to the clutch pressure plate
- C. Rear differential forward to the front wheel bearings
- D. Transaxle differential to the front wheel hubs

22. A CV joint boot's primary function is to:

- A. Retain grease in the joint and keep contaminants out
- B. Provide the bearing surface for the joint's internal balls
- C. Center the half shaft within the transaxle output bore
- D. Transmit drive torque from the joint to the wheel hub

23. On a FWD transaxle, "torque steer" is BEST described as:

- A. The tendency of the steering wheel to self-center after a turn
- B. A vibration felt in the steering wheel at highway speeds
- C. A pull to one side under hard acceleration from drive torque
- D. The effort required to turn the wheel at parking-lot speeds

24. The outer CV joint on most FWD vehicles is a:

- A. Tripod (tripot) plunge joint that allows in-and-out movement
- B. Rzeppa-type fixed ball joint that allows steering articulation
- C. Cardan universal joint with two needle bearing cross trunnions
- D. Viscous coupling that limits slip between the two front wheels

25. A FWD transaxle hums, and the noise rises only with engine rpm in a fixed gear, not with vehicle speed. This MOST likely indicates:

- A. A worn transmission shaft bearing rather than a final drive fault
- B. A worn outer CV joint articulating during straight-line driving
- C. A worn wheel bearing loaded only during cornering maneuvers
- D. A final drive ring and pinion gear with excessive backlash

26. When servicing a transaxle, the technician notices the differential pinion shaft is retained by a roll pin. The correct procedure is to:

- A. Leave the roll pin in place and work around it during service
- B. Drill out the roll pin and discard the differential case entirely
- C. Heat the differential case to expand and release the roll pin
- D. Drive out the roll pin to free the pinion shaft and side gears

27. A universal joint (Cardan joint) allows a drive shaft to:

- A. Change its overall length as the suspension moves up and down
- B. Transmit torque through a changing angle between two shafts
- C. Maintain a perfectly constant velocity at very large angles
- D. Disconnect the rear axle from the transmission when stopped

28. The slip yoke (slip joint) on a RWD drive shaft allows for:

- A. Changes in drive shaft angle as the vehicle turns corners
- B. Disengagement of the drive shaft during four-wheel drive
- C. Changes in drive shaft length as the suspension travels
- D. Balancing of the drive shaft at high rotational speeds

29. A drive shaft is checked and found to have a runout reading well beyond specification. The MOST likely cause is:

- A. A bent drive shaft tube or built-up undercoating and debris
- B. Worn universal joints with play in the bearing cross caps
- C. A failed center support bearing on a two-piece shaft
- D. An out-of-phase slip yoke installed during a prior repair

30. Universal joint operating angles that are too large will MOST likely cause:

- A. The drive shaft to lengthen and contact the exhaust system
- B. The transmission to lose lubricant past the output shaft seal
- C. The parking brake to drag and overheat the rear brakes
- D. Vibration and rapid wear of the U-joint needle bearings

31. When installing a U-joint, the needle bearings must be:

- A. Packed loosely so they can settle into position during use
- B. Kept in place in the bearing caps so none fall during assembly
- C. Replaced while the old grease is retained for lubrication
- D. Lubricated only after the drive shaft is reinstalled on the vehicle

32. A double-Cardan (constant-velocity) joint is used on some drive shafts to:

- A. Increase the maximum length the drive shaft can extend
- B. Eliminate the need for a center support bearing entirely
- C. Provide smoother operation at large drive shaft angles
- D. Allow the drive shaft to disconnect for two-wheel drive

33. The ring and pinion gear set in a drive axle is responsible for:

- A. Allowing the two drive wheels to turn at different speeds
- B. Disconnecting the front axle during two-wheel-drive operation
- C. Dampening torsional vibration from the engine and clutch
- D. Changing the direction of power flow and providing final reduction

34. A hypoid gear set, used in many RWD drive axles, is designed so that the:

- A. Pinion is mounted below the centerline of the ring gear
- B. Pinion meshes with the ring gear at a perfect right angle
- C. Ring gear and pinion share the same rotational centerline
- D. Pinion is mounted above the ring gear for higher ground clearance

35. The differential case (carrier) in a drive axle holds the:

- A. Ring gear, pinion gear, and the input pinion bearing
- B. Axle shaft bearings and the brake backing plate assembly
- C. Spider (pinion) gears, side gears, and the differential pinion shaft
- D. Pinion seal, companion flange, and the crush sleeve spacer

36. During cornering, an open differential allows the outer wheel to turn faster than the inner wheel because:

- A. The ring gear drives each axle through a separate clutch pack
- B. The spider gears rotate on their shaft, splitting speed between side gears
- C. The pinion gear changes its ratio automatically during the turn
- D. The axle shafts are connected by a viscous coupling that slips

37. The crush sleeve (collapsible spacer) in a drive axle is used to:

- A. Set the backlash between the ring gear and the pinion
- B. Retain the axle shafts in a C-clip style housing
- C. Provide a sealing surface for the differential cover gasket
- D. Establish the correct pinion bearing preload during assembly

38. A drive axle assembly should be filled with lubricant to the:

- A. Bottom of the fill plug hole when the vehicle is level
- B. Top of the ring gear regardless of vehicle position
- C. Halfway point of the differential cover sight glass
- D. Level marked on the axle shaft dipstick after warming

39. A gear ratio of 4.10:1 in a drive axle means the:

- A. Ring gear turns 4.10 times for each pinion revolution
- B. Vehicle travels 4.10 miles for each driveshaft rotation
- C. Pinion (driveshaft) turns 4.10 times for each ring gear revolution
- D. Axle shafts turn 4.10 times faster than the driveshaft does

40. A vehicle with a numerically higher axle ratio (for example, 4.10 instead of 3.08) will generally have:

- A. Better fuel economy and a higher top speed on the highway
- B. Quicker acceleration and more pulling power, with lower top speed
- C. The same performance because axle ratio does not affect output
- D. Slower acceleration but improved highway cruising economy

41. The transfer case in a four-wheel-drive vehicle is responsible for:

- A. Allowing the front wheels to turn faster than the rear wheels
- B. Splitting engine power between the front and rear drive axles
- C. Providing the final gear reduction for both front and rear axles
- D. Dampening driveline vibration between the engine and transmission

42. "Part-time" four-wheel drive differs from "full-time" four-wheel drive in that part-time systems:

- A. Include a center differential for use on all road surfaces
- B. Automatically engage the front axle when wheel slip is detected
- C. Use a viscous coupling to vary torque between the axles
- D. Lock the front and rear outputs together with no speed difference allowed

43. A four-wheel-drive system's low range is engaged by:

- A. Locking the center differential to split torque evenly
- B. Disconnecting the front driveshaft from the transfer case
- C. Selecting a reduction gear set inside the transfer case
- D. Increasing the transfer case fluid pressure to the clutches

44. Locking hubs on a four-wheel-drive front axle are used to:

- A. Lock the front differential for maximum off-road traction
- B. Connect or disconnect the front wheels from the axle shafts
- C. Engage the transfer case into four-wheel-drive high range
- D. Prevent the front driveshaft from turning in two-wheel drive

45. An all-wheel-drive (AWD) system typically differs from a part-time 4WD system in that AWD:

- A. Requires the driver to manually engage it before slippery conditions
- B. Provides only two-wheel drive until the driver shifts a lever
- C. Cannot be operated on dry pavement without driveline binding
- D. Operates continuously and is safe to use on dry pavement

46. A center differential in a full-time 4WD or AWD system is needed to:

- A. Allow the front and rear driveshafts to turn at different speeds
- B. Provide the low-range gear reduction for off-road climbing
- C. Lock all four wheels together for maximum straight-line traction
- D. Disconnect the front axle automatically at highway speeds

47. A viscous coupling used in an AWD system transfers torque to the secondary axle when:

- A. The driver manually selects four-wheel-drive mode
- B. The transfer case is shifted into the low range position
- C. A speed difference develops between the front and rear shafts
- D. The brake pedal is applied during hard deceleration

48. Which of the following is the MOST important maintenance consideration for an AWD vehicle?

- A. Replacing the transfer case chain at every oil change interval
- B. Keeping all four tires matched in size, type, and tread depth
- C. Locking the center differential before every highway trip
- D. Engaging and disengaging the front hubs weekly to keep them free

49. A "shift-on-the-fly" four-wheel-drive system allows the driver to:

- A. Shift into low range at any highway speed without slowing down
- B. Lock the center differential while cornering on dry pavement
- C. Disable the AWD system permanently for better fuel economy
- D. Engage four-wheel-drive high range while the vehicle is moving

50. Before driving a part-time 4WD vehicle off-road onto loose terrain, the driver should:

- A. Engage four-wheel drive to provide power to all four wheels
- B. Lock the center differential to prevent the axles from turning
- C. Disengage the front locking hubs to reduce driveline wear
- D. Shift the transfer case to neutral to free the driveline

PRACTICE EXAM 6: ANSWER KEY AND EXPLANATIONS

1. C — The clutch's job is to smoothly connect and disconnect engine power to the transmission, allowing the vehicle to start from rest and change gears. Torque multiplication and ratio changes happen in the gearbox, not the clutch. Smooth engagement and disengagement is the defining function.
2. A — The pressure plate's diaphragm spring supplies the clamping force that pins the disc against the flywheel. The release bearing, pilot bearing, and fork only assist in disengaging or supporting the assembly. Clamping load comes from the diaphragm spring.
3. D — Slipping results from anything that reduces clamping or contaminates the friction surfaces: oil on the disc, a worn disc, or a weak diaphragm spring. A worn pilot bearing produces noise during disengagement, not slip. It is the exception.
4. B — The release bearing transfers clutch pedal movement to the spinning pressure plate fingers, allowing the rotating assembly to be released by a non-rotating fork. It does not clamp, support the crank, or dampen vibration. Its role is the moving-to-rotating interface.
5. A — Torsional coil springs in the disc hub absorb driveline shock and dampen torsional vibration as power transfers from the engine. This smooths engagement and protects the gear train. The springs cushion torque, not clamp or center the disc.
6. C — A hard pedal comes from added mechanical resistance: a binding cable, a seized fork pivot, or a stiffer pressure plate. Air in a hydraulic circuit produces a soft, spongy pedal, the opposite feel. It is the least likely cause of a hard pedal.
7. B — A concentric slave cylinder surrounds the transmission input shaft inside the bell housing and acts directly on the release bearing, combining the two into one unit. An external slave mounts outside and pushes the fork. The internal, shaft-surrounding design is the distinguishing feature.
8. D — Proper clutch-job preparation includes supporting the engine once the transmission is removed and marking the driveshaft and linkage so they reassemble in their original positions. This preserves balance and adjustment. Draining oil or removing the flywheel first is not required.
9. C — A synchronizer brings the gear and shaft to the same speed before the engagement teeth mesh, allowing smooth, clash-free shifts. It does not lock the output shaft, multiply torque, or lubricate. Speed matching is its purpose.
10. A — The input shaft gear drives the countershaft (cluster gear) whenever the clutch is engaged, and the cluster then drives the various output gears. The output shaft and shift forks do not power the cluster. Power flows from the input gear to the countershaft.
11. B — Direct drive is a 1-to-1 ratio in which the input and output shafts are locked together and turn at the same speed, typically in fourth gear. No torque multiplication occurs. The shafts rotate as one.
12. D — Shift forks ride in the grooves of the synchronizer sleeves and slide them into engagement with the selected gear. They do not contact the gear teeth, splines, or detent balls directly. The sleeve is what the fork moves.
13. A — An overdrive ratio is one in which the output shaft turns faster than the input shaft, producing a ratio below 1-to-1 for reduced engine speed at cruise. This improves fuel economy. Output-faster-than-input defines overdrive.
14. A — The reverse idler gear adds an extra gear to the train, reversing the rotation direction of the output shaft so the vehicle moves backward. It is not there to synchronize, multiply torque, or quiet the gear. Direction reversal is its function.

15. D — A GL-5 rating indicates a higher level of extreme-pressure additive than GL-4, suited to the heavier sliding loads of hypoid drive axles. The higher EP content is the key distinction. Using the wrong rating where synchronizers are present can affect yellow-metal components.
16. C — The output (main) shaft is supported at its rear by the output shaft bearing in the tailshaft housing. The pilot and input bearings support the input side, and the countershaft bearing supports the cluster. The rear support is the tailshaft bearing.
17. A — Blocking ring wear is checked with a feeler gauge measuring the gap between the ring and the gear cone; insufficient gap means the ring is worn and should be replaced. A bore gauge, torque wrench, or shaft micrometer measure other dimensions. The ring-to-cone gap is the wear indicator.
18. D — In a constant-mesh transmission the forward gear pairs are always meshed and rotating together, with engagement made through synchronizers rather than sliding gears into mesh. Not all gears drive the output at once. Constant mesh refers to the gears being permanently engaged with each other.
19. C — Testing in different gears lets the technician hear whether a noise changes with gear selection, helping separate gear-specific faults from bearings that turn regardless of gear. The pattern points to the source. Gear-versus-bearing isolation is the diagnostic value.
20. B — A transaxle combines the transmission, differential, and final drive into a single housing, which is why it suits transverse front-wheel-drive layouts. It does not include the engine, cooling, or steering systems. The three drivetrain functions in one unit define a transaxle.
21. D — The half shafts carry power from the transaxle differential outward to the front wheel hubs. They do not connect to the crankshaft, input shaft, or a rear differential. The differential-to-hub path is their function.
22. A — A CV joint boot seals the joint, retaining its grease and keeping out dirt and water. The internal balls and races carry torque; the boot only protects them. Sealing and lubrication retention is the boot's job.
23. C — Torque steer is a pull to one side under hard acceleration, caused by unequal drive forces in the front axles. It is unrelated to self-centering, highway vibration, or parking effort. Acceleration-induced pull defines torque steer.
24. B — The outer CV joint is typically a Rzeppa fixed ball joint, which transmits uniform speed while allowing the steering articulation the front wheels require. The inner joint is usually a plunging tripod. The fixed ball design handles steering angles.
25. A — A hum that rises with engine rpm in a fixed gear but not with road speed comes from a transmission shaft bearing turning with engine input, not the final drive, which tracks vehicle speed. CV joints and wheel bearings tie to road speed and cornering. The rpm correlation points to a transmission bearing.
26. D — A roll-pin-retained differential pinion shaft is freed by driving out the roll pin, after which the pinion shaft and side gears can be removed. The pin is removed, not drilled into the case or heated. Driving out the pin is the correct procedure.
27. B — A Cardan universal joint transmits torque through a changing angle between two shafts as the driveline flexes. Length change is handled by the slip yoke, and constant velocity by a CV joint. Torque transfer through an angle is the U-joint's function.
28. C — The slip yoke accommodates changes in drive shaft length as the suspension moves the axle closer to or farther from the transmission. It does not change angle, disconnect drive, or balance the shaft. Length change is its purpose.

29. A — Runout well beyond specification usually means the drive shaft tube is bent or has built-up undercoating and debris throwing it off true. Worn joints, support bearings, or phasing produce different symptoms. A bent or fouled tube causes excess runout.
30. D — U-joint angles that are too large create cyclic speed variation that produces vibration and rapidly wears the needle bearings in the caps. Correct angles keep operation smooth. Excessive angle leads to vibration and bearing wear.
31. B — During U-joint installation the needle bearings must be held in place in the caps so none fall out or fold over, which would damage the joint. Fresh grease and proper seating are also required. Keeping the needles positioned prevents assembly damage.
32. C — A double-Cardan joint pairs two universal joints to act as a constant-velocity unit, providing smoother operation at the large angles found on some drive shafts. It does not extend length, replace a support bearing, or disconnect drive. Smoothness at large angles is its purpose.
33. D — The ring and pinion turn the power flow ninety degrees from the drive shaft to the axle shafts and provide the final gear reduction. Wheel-speed differences are handled by the differential gears, not the ring and pinion. Direction change plus final reduction defines their role.
34. A — In a hypoid gear set the pinion meshes below the centerline of the ring gear, which lowers the drive shaft and the vehicle floor. The offset is the defining hypoid feature. It is not an on-center or right-angle-only mesh.
35. C — The differential case (carrier) houses the spider (pinion) gears, the side gears, and the differential pinion shaft they ride on. The pinion bearing, axle bearings, and seal mount elsewhere in the housing. The internal differential gears live in the carrier.
36. B — During a turn the spider gears rotate on their shaft and walk around the side gears, allowing the outer wheel to turn faster than the inner one. This is the open differential's basic action. The spider gears split speed between the side gears.
37. D — The collapsible crush sleeve sets the correct pinion bearing preload as the pinion nut is torqued and the sleeve crushes. Backlash and axle retention are set by other components. Pinion bearing preload is the crush sleeve's purpose.
38. A — A drive axle is filled to the bottom of the fill plug hole with the vehicle level, which establishes the correct lubricant level. Filling to the ring gear or by other marks would over- or under-fill. The fill plug opening is the level reference.
39. C — A 4.10:1 ratio means the pinion (driveshaft) turns 4.10 times for each single revolution of the ring gear and axle. The larger first number is the driveshaft turns per axle turn. This sets the gear reduction.
40. B — A numerically higher axle ratio multiplies torque more, giving quicker acceleration and greater pulling power at the cost of higher engine rpm and a lower top speed. A lower ratio favors economy and top speed. Higher number means more pull, less speed.
41. B — The transfer case splits engine power between the front and rear drive axles in a four-wheel-drive vehicle. Final reduction occurs at the axles, and speed differences are handled elsewhere. Distributing power front-to-rear is its function.
42. D — A part-time system locks the front and rear outputs together with no allowance for speed difference, which is why it is limited to low-traction surfaces. Full-time systems add a center differential. The locked, no-differential output defines part-time 4WD.
43. C — Low range is engaged by selecting a reduction gear set inside the transfer case, multiplying torque for slow, heavy work. It is not produced by locking a differential or changing fluid pressure. The reduction gearset provides low range.

44. B — Locking hubs connect or disconnect the front wheels from the front axle shafts; when unlocked, the wheels turn freely without driving the front driveline. They do not lock the differential or operate the transfer case. Coupling the wheel to the shaft is their function.
45. D — AWD operates continuously and is safe on dry pavement because a center differential or coupling absorbs front-to-rear speed differences. It does not require manual engagement or default to two-wheel drive. Continuous, pavement-safe operation distinguishes AWD.
46. A — A center differential lets the front and rear driveshafts turn at different speeds, preventing the windup that would otherwise occur on dry pavement. It does not provide low range or lock the wheels. Allowing front-to-rear speed difference is its purpose.
47. C — A viscous coupling sends torque to the secondary axle when a speed difference develops between the front and rear shafts and the silicone fluid resists the shear. It engages automatically with slip, not by driver selection or braking. Speed difference triggers torque transfer.
48. B — Matching all four tires in size, type, and tread depth is critical on AWD vehicles because mismatched rolling diameters force the center differential or coupling to work constantly and wear out. Tire matching protects the driveline. It is the key AWD maintenance concern.
49. D — Shift-on-the-fly systems let the driver engage four-wheel-drive high range while the vehicle is moving, below a specified speed. Low range still requires nearly stopping. Engaging high range on the move is the feature.
50. A — Before driving onto loose off-road terrain, the driver should engage four-wheel drive so power reaches all four wheels for traction. Locking a center differential, unlocking hubs, or shifting to neutral would not provide drive. Engaging 4WD prepares the vehicle.