Name\_\_\_\_\_

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

1) What are the causes and possible corrections for torque steer?

2) What is the difference between a lead (drift) and a pull?

3) What are the causes and possible corrections for memory steer?

4) What are the necessary steps to follow for a four-wheel alignment?

5) What are 10 pre-alignment checks that should be performed before the wheel alignment is checked and/or adjusted?

- 1) Torque steer is the pulling of a vehicle during acceleration only on a front-wheel drive vehicle. If severe, the technician should carefully inspect and replace, if necessary, the engine and/or transaxle mounts or any other component that has failed to keep the engine and drive train level. Page Ref: 343
- 2) A pull is a condition that causes a definite "tug" on the steering wheel toward one side while driving straight on a level road. A lead or drift is the movement of a vehicle toward one side when the driver's hands are temporarily removed from the steering wheel, but is not enough to cause corrective counter steering pressure. Page Ref: 342
- 3) Memory steer is usually caused by binding in the steering or suspension system. By disconnecting the tie rods from the steering knuckles, a technician can check to see if the front wheels rotate through their steering axis smoothly. To prevent "installing" a memory steer into a vehicle, all steering and suspension components should be tightened only after the vehicle is on the ground with the wheels in the straight ahead position. Page Ref: 343

## 4) A proper four-wheel alignment should be done in the following sequence: rear camber, rear toe, front caster, and camber, then front toe.

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- 5) Ten pre-alignment inspections include the following items:
  - a. Tire pressures
- f. Ride (trim) height
- b. Wheel bearings g. Steering gear looseness h. Control arm bushings
- Tie rod ends c.
- d. Center links

- i. Idler arm
- e. Stabilizer bar links and bushings j. Excessive or unequal loads
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