Name_____

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

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

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

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

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

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

1) 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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2) 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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- 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: 595
- 4) 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: 595
- 5) 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: 594