ASE-Type Questions

1. Technician A says correct wheel alignment can improve an automobile's handling ability. Technician B says correct wheel alignment can improve an automobile's fuel economy. Who is right?
   (A) A only.
   (B) B only.
   (C) Both A and B.
   (D) Neither A nor B.
2. Technician A says one of the main functions of wheel alignment is to make the tires roll without slipping under all operating conditions. Technician B says one of the main functions of wheel alignment is to adjust for badly worn steering parts. Who is right?
   (A) A only.
   (B) B only.
   (C) Both A and B.
   (D) Neither A nor B.
3. Technician A says the term "caster" refers to the forward or rearward tilt of the steering knuckle when viewed from the side of the car. Technician B says the term "caster" refers to the forward or rearward tilt of the tie-rod when viewed from the side of the car. Who is right?
   (A) A only.
   (B) B only.
   (C) Both A and B.
   (D) Neither A nor B.
4. Technician A says one of the purposes of caster is to aid directional control of the vehicle. Technician B says one of the purposes of caster is to load the larger inner wheel bearing. Who is right?
   (A) A only.
   (B) B only.
   (C) Both A and B.
   (D) Neither A nor B.
5. A car's steering wheel does not return to the straight-ahead position after turning. Technician A adjusts the automobile's caster angle. Technician B says the car's caster angle has nothing to do with this problem. Who is right?
   (A) A only.
   (B) B only.
   (C) Both A and B.
   (D) Neither A nor B.
6. Technician A tilts the top of a car's steering knuckle toward the rear of the car to adjust for "positive" camber. Technician B tilts the top of the tie-rod toward the front of the car to adjust for "positive" caster. Who is right?
   (A) A only.
   (B) B only.
   (C) Both A and B.
   (D) Neither A nor B.
7. Technician A says cars with manual steering have more "negative" caster than cars with power steering. Technician B says cars with power steering have more "negative" caster than cars with manual steering. Who is right?
   (A) A only.
   (B) B only.
   (C) Both A and B.
   (D) Neither A nor B.
8. Technician A says camber is the inward or outward tilt of the wheel and tire assembly when viewed from the front of the car. Technician B says camber is the inward or outward tilt of the steering knuckle when viewed from the front of the car. Who is right?
   (A) A only.
   (B) B only.
   (C) Both A and B.
   (D) Neither A nor B.

9. Technician A adjusts an automobile's camber angle to help prevent tire wear on the inner or outer tread. Technician B adjusts an automobile's caster angle to help prevent tire wear on the inner or outer tread. Who is right?
   (A) A only.
   (B) B only.
   (C) Both A and B.
   (D) Neither A nor B.
10. Technician A says with "positive" camber, the tops of the wheels tilt outward when viewed from the front of the car. Technician B says with "positive" camber, the tops of the wheels tilt inward when viewed from the front of the car. Who is right?
   (A) A only.
   (B) B only.
   (C) Both A and B.
   (D) Neither A nor B.
11. Technician A normally adjusts a car's positive camber setting at about 1/4° to 1/2°. Technician B normally adjusts a car's positive camber setting at about 3° to 4°. Who is right?
   (A) A only.
   (B) B only.
   (C) Both A and B.
   (D) Neither A nor B.
12. Technician A says "toe-in" is produced when the front of the wheels are closer together than the rear of the wheels. Technician B says "toe-in" is produced when the front of the wheels are farther apart than the rear of the wheels. Who is right?
   (A) A only.
   (B) B only.
   (C) Both A and B.
   (D) Neither A nor B.
13. Technician A says a rear-wheel-drive car's toe-in setting should be 1/16″ to 1/4″. Technician B says a rear-wheel-drive car's toe-in setting should be 1.6 mm to 6 mm. Who is right?
   (A) A only.
   (B) B only.
   (C) Both A and B.
   (D) Neither A nor B.
14. An automobile needs a wheel alignment. Before performing this task, Technician A checks for loose wheel bearings. Before performing this task, Technician B checks for wheel or tire runout. Who is right?
   (A) A only.
   (B) B only.
   (C) Both A and B.
   (D) Neither A nor B.
15. Technician A adjusts a car's toe angle by lengthening or shortening the steering knuckle. Technician B adjusts a car's toe angle by lengthening or shortening the tie-rods. Who is right?
   (A) A only.
   (B) B only.
   (C) Both A and B.
   (D) Neither A nor B.

Activities—Chapter 74

1. Demonstrate for your instructor a prealignment inspection of tires, steering, and suspension of a vehicle in the shop for a front-end alignment.
2. Check and adjust the caster, camber, or toe-in of a front suspension.
3. Prepare a bill for an alignment. Use a flat labor rate established by your instructor and a $25/hour charge. Include the cost of any parts used. Add up all costs.