Automotive Steering, Suspension, and Alignment, 8th Edition Quiz 12A

Name\_\_\_\_\_

## MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

- 1) The pitman shaft is also called the \_\_\_\_\_\_ shaft.
  - A) sector
  - B) input
  - C) worm
  - D) spline

2) In this drawing, what components move when the worm shaft is rotated?



- 3) Technician A says that federal law requires all vehicles to be equipped with collapsible steering columns. Technician B says that a hammer can be used to install a steering wheel onto the steering shaft. Which technician is correct?
  - A) Technician A only
  - B) Technician B only
  - C) Both technicians A and B
  - D) Neither technician A nor B

4) Which part in the steering column allows for changes in the angle between the upper and lower shafts?

- A) Flexible coupling
- B) Column cover
- C) Universal joint
- D) Collapsible section

- 5) Technician A says that a flexible coupling connects the steering shaft to the gear input shaft. Technician B says that the coupling connecting the steering shaft to the gear input shaft may be a universal joint. Which technician is correct?
  - A) Technician A only
  - B) Technician B only
  - C) Both technicians A and B
  - D) Neither technician A nor B

6) After removing the center nut, use a \_\_\_\_\_\_ to remove the steering wheel from the steering shaft.

- A) puller
- B) hammer
- C) shaft depressor
- D) snap ring plier
- 7) Technician A says that worm bearing preload is also called worm end play. Technician B says that sector lash is also known as gear lash. Which technician is correct?
  - A) Technician A only
  - B) Technician B only
  - C) Both technicians A and B
  - D) Neither technician A nor B

8) Recirculating steel balls are used in most conventional steering gears because they \_\_\_\_\_.

- A) provide for a variable ratio
- B) keep the steering wheel centered
- C) reduce friction
- D) help provide feedback to the driver regarding the road surface

9) What causes a variable ratio steering gear to be able to change the ratio as the steering wheel is turned?

- A) Using two or three different sector gears, depending on design
- B) Using a variable length pitman arm
- C) Changing the number of teeth on the worm gear
- D) Changing the length of the teeth on the sector gear

10) What adjustment is being made in this illustration?



- A) Overcenter adjustmentB) Wormshaft endplayC) Ball return ramps
- D) Wormshaft preload

Answer Key Testname: ASSA8\_12A

> 1) A Page Ref: 216 2) C Page Ref: 219 3) A Page Ref: 214-215 4) C Page Ref: 213 5) C Page Ref: 213 6) A Page Ref: 211 7) C Page Ref: 221 8) C Page Ref: 219 9) D Page Ref: 218 10) A Page Ref: 221