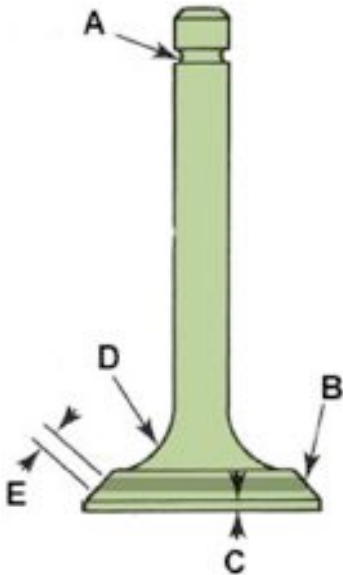


Name _____

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

- 1) The proper relationship between intake and exhaust valve diameter is _____. 1) _____
- A) intake valve size is 85% of exhaust valve size
 - B) exhaust valve size is 85% of intake valve size
 - C) exhaust valve size is 38% of intake valve size
 - D) intake valve size is 45% of exhaust valve size

- 2) Which part of this valve is called the valve margin? 2) _____



- A) A
- B) B
- C) C
- D) D
- E) E

- 3) Dampers (damper springs) are used inside some valve springs to _____. 3) _____
- A) prevent valve spring surge
 - B) keep the valve spring attached to the valve
 - C) decrease valve spring pressure
 - D) retain valve stem seals

- 4) Umbrella-type valve stem seals _____. 4) _____
- A) fit tightly onto the valve guide
 - B) fit on the valve face to prevent combustion leaks
 - C) fit tightly onto the valve stem
 - D) lock under the valve retainer

- 5) Which of the following statements is TRUE about valve seats? 5) _____
- A) Insert seats are used only in cast-iron heads.
 - B) Insert seats do not fit into a machined recess in the cylinder head of automotive engines.
 - C) Exhaust valve seats run cooler in aluminum heads than in cast-iron heads.
 - D) Integral exhaust valve seats operate at hotter temperatures than do insert seats.
- 6) Which of these is the most common valve spring keeper? 6) _____
- A) Horseshoe
 - B) Clip
 - C) Split keepers
 - D) Conical
- 7) If an interference angle is machined on a valve or seat, the angle is usually _____. 7) _____
- A) 1 degree
 - B) 0.005 degree
 - C) 1-3 degree
 - D) 0.5-0.75 degree
- 8) Technician A says that valve stem height should be checked and the top of the valve ground, if necessary. Technician B says that after a thorough cleaning, the cylinder head should be assembled using new valve stem seals. Who is right? 8) _____
- A) Technician A only
 - B) Technician B only
 - C) Both technicians
 - D) Neither technician
- 9) A valve seat should be concentric to the valve guide to a maximum TIR (total indicator runout) of _____. 9) _____
- A) 0.006 inch
 - B) 0.004 inch
 - C) 0.002 inch
 - D) 0.0015 inch
- 10) A valve should be discarded if the margin is less than _____ after refacing. 10) _____
- A) 0.001 inch
 - B) 0.006 inch
 - C) 0.03 inch
 - D) 0.06 inch