

Name _____

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

- 1) Technician A says that the only valve guide repair option for integral valve guides is to use oversize-stem valves. Technician B says that valve guides should be checked for wear using a ball gauge or a dial indicator. Who is right? 1) _____
 - A) Technician A only
 - B) Technician B only
 - C) Both technicians
 - D) Neither technician

- 2) Resurfacing of the cylinder head has no effect on the compression ratio. 2) _____
 - A) True
 - B) False

- 3) Two technicians are discussing a Hemi engine. Technician A says that a Hemi is an engine with a hemi-spherical shaped combustion chamber. Technician B says that all Hemi engines are cam-in-block designs. Which technician is correct? 3) _____
 - A) Technician A only
 - B) Technician B only
 - C) Both technicians
 - D) Neither technician

- 4) Valve _____ occurs when both valves are open at the same time at the end of the exhaust stroke and at the beginning of the intake stroke. 4) _____
 - A) collision
 - B) rotation
 - C) overlap
 - D) inversion

- 5) A warped aluminum cylinder head can be restored to useful service by _____. 5) _____
 - A) grinding the gasket surface and then align honing the camshaft bore
 - B) heating in an oven at 500°F with shims under each end, allowing it to cool, and then machining it
 - C) heating it to 500°F for 5 hours and cooling it rapidly before final machining
 - D) machining the gasket surface to one-half of the warped amount and then heating the head in an oven and allowing it to cool slowly

- 6) Technician A says that cylinder head resurfacing machines include grinders and milling machines. Technician B says that cylinder head resurfacing will change the compression ratio. Who is right? 6) _____
 - A) Technician A only
 - B) Technician B only
 - C) Both technicians
 - D) Neither technician

- 7) Some vehicle manufacturers recommend repairing integral guides with _____. 7) _____
- A) OS stem valves
 - B) knurling
 - C) replacement valve guides
 - D) valve guide inserts
- 8) What other engine component may have to be machined if the cylinder heads are machined on a V-type engine? 8) _____
- A) Exhaust manifold
 - B) Intake manifold
 - C) Block deck
 - D) Distributor mount (if the vehicle is so equipped)
- 9) The gasket surface of a cylinder head, as measured with a precision straightedge, should have a maximum variation of _____. 9) _____
- A) 0.002 inch in any 6-inch length or 0.004 inch overall
 - B) 0.001 inch in any 6-inch length or 0.004 inch overall
 - C) 0.020 inch in any 10-inch length or 0.020 inch overall
 - D) 0.004 inch in any 10-inch length or 0.008 inch overall
- 10) Which type of valve guide is most used in a cast-iron head? 10) _____
- A) Integral
 - B) Bronze
 - C) Powdered metal (PM)
 - D) Thin-wall sleeve type

Answer Key

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1) B

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2) B

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3) A

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4) C

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5) B

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6) C

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7) A

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8) B

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9) A

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10) A

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