Manual Drivetrains and Axles, 8th Edition
Quiz 17A

Name_____

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

1) Technician A uses a dial indicator to check a hub flange for runout. Technician B says that excessive runout on a wheel hub flange would cause low frequency vibrations. Which technician is correct? 1) _____
   A) Technician A only
   B) Technician B only
   C) Both technicians
   D) Neither technician

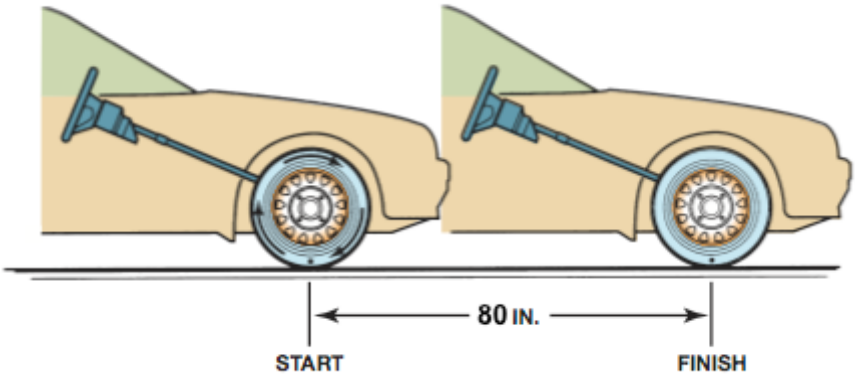
2) A vibration is felt in the steering wheel during braking only. A common cause of the vibration is _____. 2) _____
   A) Worn idler arm
   B) Out of balance front tires
   C) Loose or defective wheel bearings
   D) Warped or nonparallel front disc brake rotors

3) Technician A says that tires and wheels are the most common source of low frequency vibrations. Technician B says that engine or transmission mounts are most common source of low frequency vibrations. Which technician is correct? 3) _____
   A) Technician A only
   B) Technician B only
   C) Both technicians
   D) Neither technician

4) What does NVH stand for? 4) _____
   A) Noise, vibration, and harshness
   B) Normal vibration harmonics
   C) Net value of harshness
   D) None of these

5) A vibration that is felt in the steering wheel at highway speeds is usually due to _____. 5) _____
   A) Defective or out–of–balance rear tires
   B) Defective or out–of–balance front tires
   C) Out–of–balance or bent drive shaft on a RWD vehicle
   D) Out–of–balance drive axle shaft or defective outer CV joints on a FWD vehicle

6) Calculate the rolling frequency of this tire at 50 mph. 6) _____



A) 11 Hz
B) 13.8 Hz
C) 653 Hz
D) 7.4 Hz

7) A defective clutch release (throw out) bearing is usually heard when the clutch is _____. 7) _____
A) Engaged in neutral
B) Disengaged in gear
C) Depressed to take up any free play
D) Engaged in first gear or reverse

8) Driveshaft vibrations may be corrected by using _____ to balance the shaft. 8) _____
A) Clip–on wheel balancing weights
B) Hose clamps
C) Balancing fluid
D) Stick–on wheel balancing weights

9) The maximum allowable drive shaft runout is _____. 9) _____
A) 0.030 in. (0.8 mm)
B) 0.10 in. (2.5 mm)
C) 0.50 in. (13 mm)
D) 0.015 in. (0.4 mm)

10) What is the first step in diagnosing a noise or vibration complaint? 10) _____
A) Test drive to verify the concern
B) Visual inspection of likely worn parts
C) Jounce test
D) None of these

Answer Key
Testname: MDA8_17A

1) C
Page Ref: 326-327
2) D
Page Ref: 323
3) A
Page Ref: 325
4) A
Page Ref: 321
5) B
Page Ref: 322
6) A
Page Ref: 325
7) C
Page Ref: 331
8) B
Page Ref: 330
9) A
Page Ref: 329
10) A
Page Ref: 322