

**PHYSICS 198**

**Exam 2**

**Fall 1997**

Name \_\_\_\_\_

Allowed: 3" x 5" card and calculator.

Not Allowed: notebooks and textbooks.

Use a No. 2 pencil and put your NAME and STUDENT SOCIAL SECURITY NUMBER on the scoring sheet.

Choose the most correct answer.

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1. A Physics 198 student holds two identical tuning forks far apart, one in each hand. When one is struck the other is also heard to ring (although less strongly). This demonstrates

- a) resonance.                      b) refraction.                      c) diffraction.  
d) reflection.                      e) the Doppler effect.

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2. The speed of sound in a guitar string depends

- a) only on tension and mass per unit length.  
b) mass, mass per unit length, and tension.  
c) only on tension.  
d) only on length and mass per unit length.  
e) only on mass per unit length.

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3. Compared with air, the speed of sound in aluminum is

- a) much, much slower.                      b) a little slower.                      c) the same.  
d) a little faster.                      e) over ten times as fast.
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