

Name: \_\_\_\_\_

ID: A

- \_\_\_\_\_ 20. Two waves arrive at the same place at the same time exactly in step with each other. Each wave has an amplitude of 2.5 m. The resulting wave has an amplitude of
- a. 0.6 m.
  - b. 1.3 m.
  - c. 2.5 m.
  - d. 5.0 m.
  - e. 10.0 m.
- \_\_\_\_\_ 21. Two vibrating tuning forks held side by side will create a beat frequency of what value if the individual frequencies of the two forks are 216 Hz and 224 Hz, respectively?
- a. 6 Hz
  - b. 8 Hz
  - c. 9 Hz
  - d. 3 Hz
- \_\_\_\_\_ 22. Two vibrating tuning forks held side by side will create a beat frequency of what value if the individual frequencies of the two forks are 567 Hz and 565 Hz, respectively?
- a. 8 Hz
  - b. 5 Hz
  - c. 2 Hz
  - d. 7 Hz
- \_\_\_\_\_ 23. Two notes have a beat frequency of 4 Hz. The frequency of one note is 420 Hz. What is the frequency of the other note?
- a. 422 Hz or 418 Hz
  - b. 105 Hz
  - c. 424 Hz or 416 Hz
  - d. 1680 Hz
- \_\_\_\_\_ 24. Two violin players tuning their instruments together hear 8 beats in 2 s. What is the frequency difference between the two violins?
- a. 2 Hz
  - b. 4 Hz
  - c. 8 Hz
  - d. 16 Hz