

Earthquake Practice

A seismic station located at point A is 5400 kilometers away from the epicenter of the earthquake. If the arrival time for the *P*-wave at point A was 2:00 p.m., the arrival time for the *S*-wave at point A was approximately

- (1) 1:53 p.m.
- (2) 2:07 p.m.
- (3) 2:09 p.m.
- (4) 2:16 p.m.

A seismograph station recorded the arrival of the first *P*-wave at 7:32 p.m. from an earthquake that occurred 4000 kilometers away. What time was it at the station when the earthquake occurred?

- (1) 7:20 p.m.
- (2) 7:25 p.m.
- (3) 7:32 p.m.
- (4) 7:39 p.m.

A seismic station 4000 kilometers from the epicenter of an earthquake records the arrival time of the first *P*-wave at 10:00:00. At what time did the first *S*-wave arrive at this station?

- (1) 9:55:00
- (2) 10:05:40
- (3) 10:07:05
- (4) 10:12:40

The first *S*-wave arrived at a seismograph station 11 minutes after an earthquake occurred. How long after the arrival of the first *P*-wave did this first *S*-wave arrive?

- (1) 3 min 15 s
- (2) 4 min 55 s
- (3) 6 min 05 s
- (4) 9 min 00 s

A seismic station is recording the seismic waves produced by an earthquake that occurred 4200 kilometers away. Approximately how long after the arrival of the first *P*-wave will the first *S*-wave arrive?

- (1) 1 min 05 sec
- (2) 5 min 50 sec
- (3) 7 min 20 sec
- (4) 13 min 10 sec

An earthquake's first *P*-wave arrives at a seismic station at 12:00:00. This *P*-wave has traveled 6000 kilometers from the epicenter. At what time will the first *S*-wave from the same earthquake arrive at the seismic station?

- (1) 11:52:20
- (2) 12:07:40
- (3) 12:09:20
- (4) 12:17:00

The distance from Albany, New York, to the epicenter of this earthquake is 5600 km. Approximately how much longer did it take for the *S*-wave to arrive at Albany than the *P*-wave?

- (1) 4 minutes and 20 seconds
- (2) 7 minutes and 10 seconds
- (3) 9 minutes and 0 seconds
- (4) 16 minutes and 10 seconds