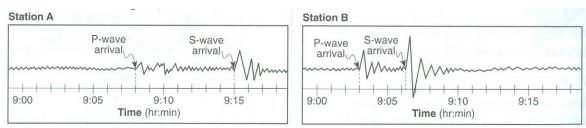
Review Selection #1: Earthquakes



- 1. Explain how the seismograms recorded at Station A and Station B indicate that Station A is farther from the earthquake epicenter than Station B.
- 2. How far from the earthquake epicenter is Station A?
- 3. An earthquake's P-wave arrived at a seismograph station at 2 hours 45 minutes 00 seconds. The earthquake's S-wave arrived 3 minutes later. What is the approximate distance from the seismograph station to the epicenter of the earthquake?
 - 1) 700 km 2) 1800 km 3) 1200 km 4) 2500 km
- 4. An earthquake's first P-wave arrives at a seismic station at 2:40:00. The distance to the epicenter is 4,000 kilometers. At what time will the first S-wave arrive at the seismic station?
 - 1) 2:34:20 2) 2:52:00 3) 2:54:00 4) 2:45:40
- 5. An S-wave arrives at a seismic station at 4:30:00. The distance to the epicenter is 5,400 km. At what time did the first P-wave arrive at the seismic station?
 - 1) 4:23:00 2) 4:37:00 3) 4:38:40 4) 4:45:40
- 6. An earthquake begins at the epicenter at 10:00:00am. The S-wave is first recorded at the seismic station at 10:12:40. At what time did the first P-wave arrive at this station?
 - 1) 9:54:30 2) 10:05:30 3) 9:53:00 4) 10:07:00
- 7. The origin time of an earthquake is 7:30pm. The P-wave reaches a seismic station at 7:34:20. At what time will the first S-wave reach this station?
 - 1) 7:22:00 2) 7:38:00 3) 7:26:30 4) 7:33:30