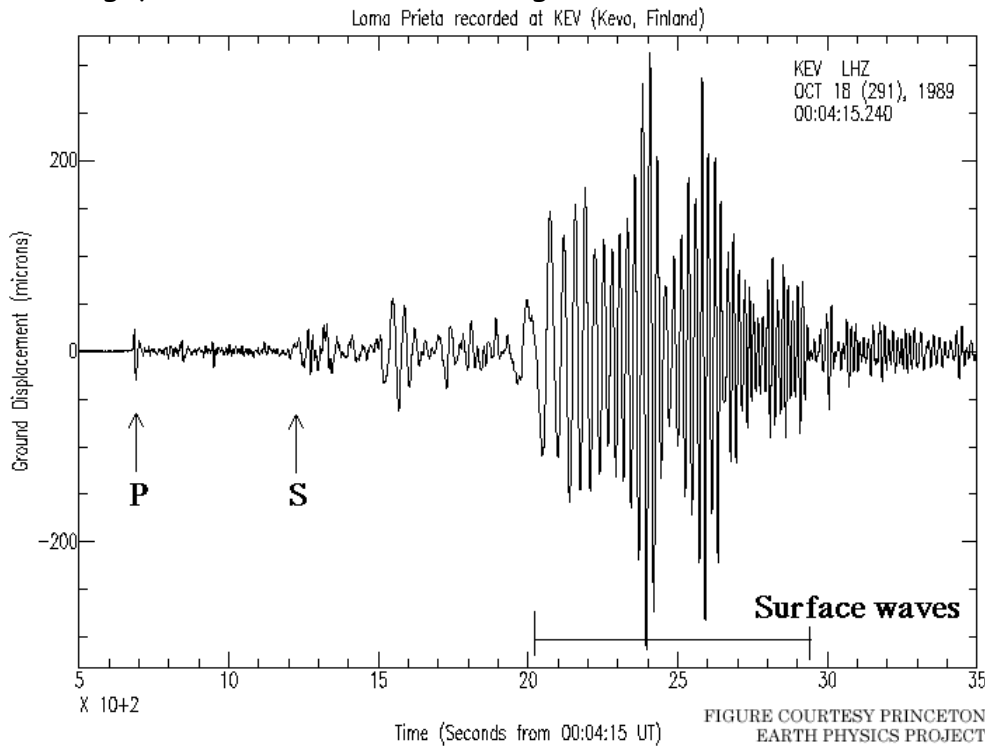


# Interpreting Seismograms Worksheet

Name \_\_\_\_\_

Answer the following questions about the seismogram. Round times to the closest half second.



1. At what time did the P waves begin (Time in seconds)? \_\_\_\_\_ seconds
2. At what time did the S waves begin (Time in seconds)? \_\_\_\_\_ seconds
3. How long did the surface waves last? \_\_\_\_\_ seconds

Estimate times for 4-6 to the nearest 50 seconds.

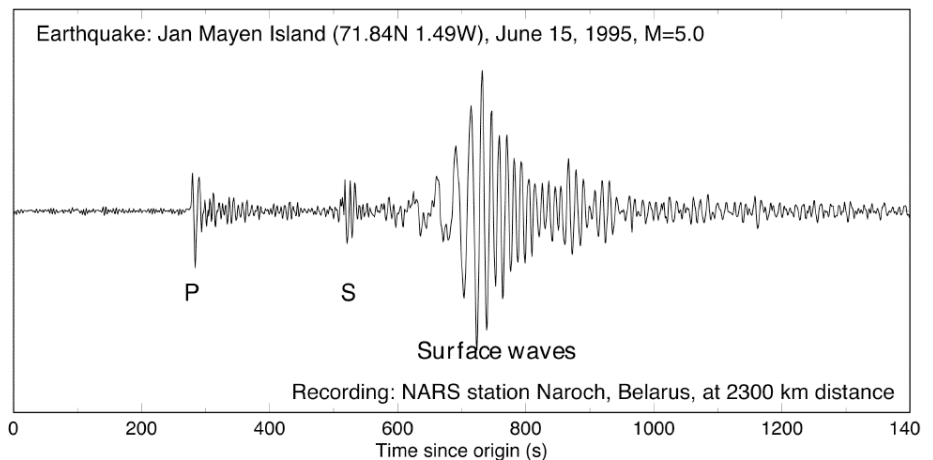
4. At what time did the P waves begin (Time in seconds)? \_\_\_\_\_ seconds

5. At what time did the S waves begin (Time in seconds)?

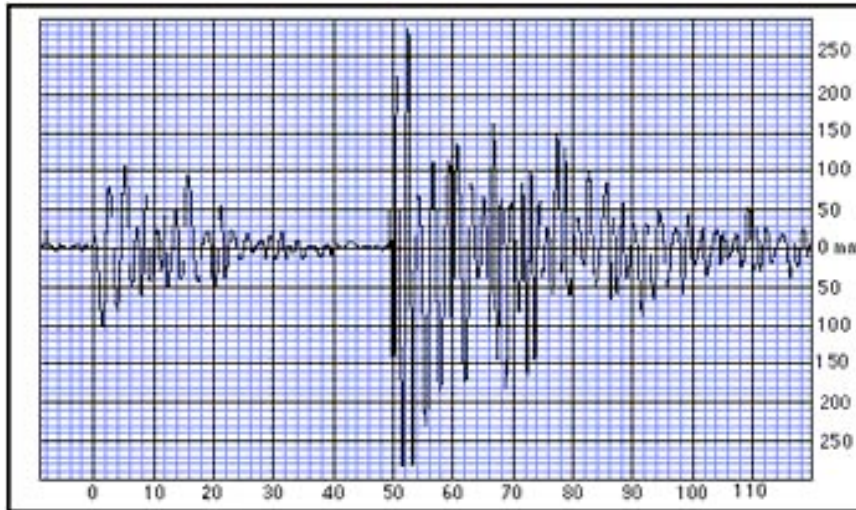
\_\_\_\_\_ seconds

6. How long did the surface waves last?

\_\_\_\_\_ seconds



The following graph shows on the P and S waves from an earthquake (no surface waves; P waves are the smaller ones, S waves are larger ones). Answer the questions and use the graph at bottom find the distance from the earthquake



4. Find the difference between the P wave starting time and S wave starting time to determine the SP time gap.

$$\underline{\quad} \text{ s} - \underline{\quad} \text{ s} = \underline{\quad} \text{ s}$$

(S time - P time = SP Gap)

5. Use the S-P line on the bottom graph to estimate the distance to the epicenter  
 \_\_\_\_\_ Km

6. CHALLENGE: Calculate the S-P gap and distance for the earthquake at the bottom (HINT: This graph DOES show surface waves).

$$\underline{\quad} \text{ s} - \underline{\quad} \text{ s} = \underline{\quad} \text{ s}$$

(S time - P time = SP Gap)

distance to the epicenter \_\_\_\_\_ Km

