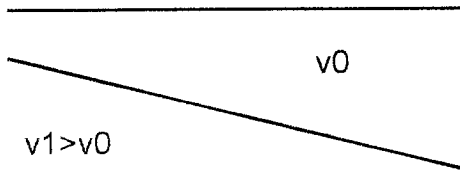


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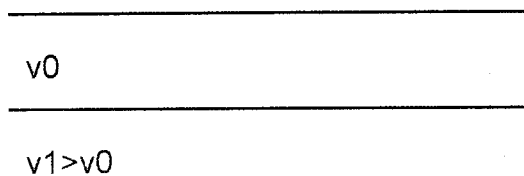
DO #1, 2, 3 PLUS TWO MORE

1. State Snell's Law of Refraction. Explain the meaning of each significant part.
2. Draw travel-time curves for the situation. Clearly explain each significant feature of the curves.



3. Thoroughly discuss the flat layer case where $v_1 < v_0 < v_2$. Sketch ray paths and travel-time curves.

4. Derive travel-time equations for a single horizontal interface.



5. Explain cross-hole seismic tomography. What are some uses of the method?
6. Compare and contrast P waves and S waves.
7. Write a brief proposal for a refraction study in your home town. Include purpose, geology of area, field methods, data analysis and expected results.