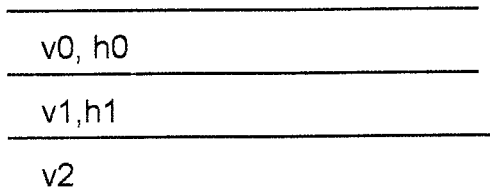


DO QUESTIONS 1, 2 AND 3 PLUS TWO MORE. HAND IN TEST PAPER.

1. Derive exact expressions for the travel time of a reflection from the base of the bottom layer (v_1 layer). Source to receiver separation is x .



2. Explain how the dynamic correction is applied to CMP data. What is the purpose of the correction?

3. What are the Rayleigh reflection and transmission coefficients (include formulae)? Why are they important? Explain in detail.

4. Compare and contrast the seismic reflection and seismic refraction methods. Include such aspects as field procedure, goals, ray paths, data processing, etc..

5. What is the reason for migrating reflection data (assume CMP data)? Explain one way by which it can be done.

6. What are multiple echoes? Why do we wish to eliminate them? How can we reduce them? Assume CMP data.

7. Divide this single-channel marine reflection record into seismic stratigraphic units. Explain how you picked the units. Describe each one.

