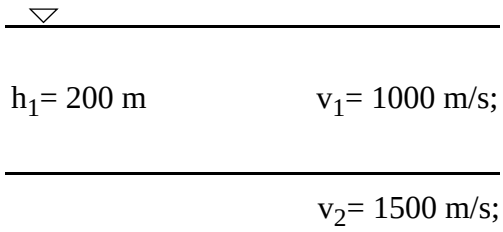
Reflection seismic 1
script

Exercise for Reflection seismic 1 - Excercise 1 (05.11.2001)

(1) Given is the following horizontally layered medium:



(a) Calculate the reflection and transmission coefficients (R, T, E_R und E_T) for the vertically travelling P waves.

(b) Calculate the critical distance x_{crit}, the crossover distance x_{cross}. and the t_0-time.

(b) Construct a traveltime diagram (direct Wave, Reflection and Refraction).

(2) Given is the following layered earth.

h_1= 10 m	v_1= 600 m/s
h_2= 40 m	v_2= 1800 m/s
h_3= 100 m	v_3= 2000 m/s
h_4= 200 m	v_4= 3000 m/s

h_i is the height of each layer

Determine the RMS-velocity for each layer.
Determine from the RMS-velocities the interval velocities for each separate layer

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Hand in at 19.11.2000

Questions:
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