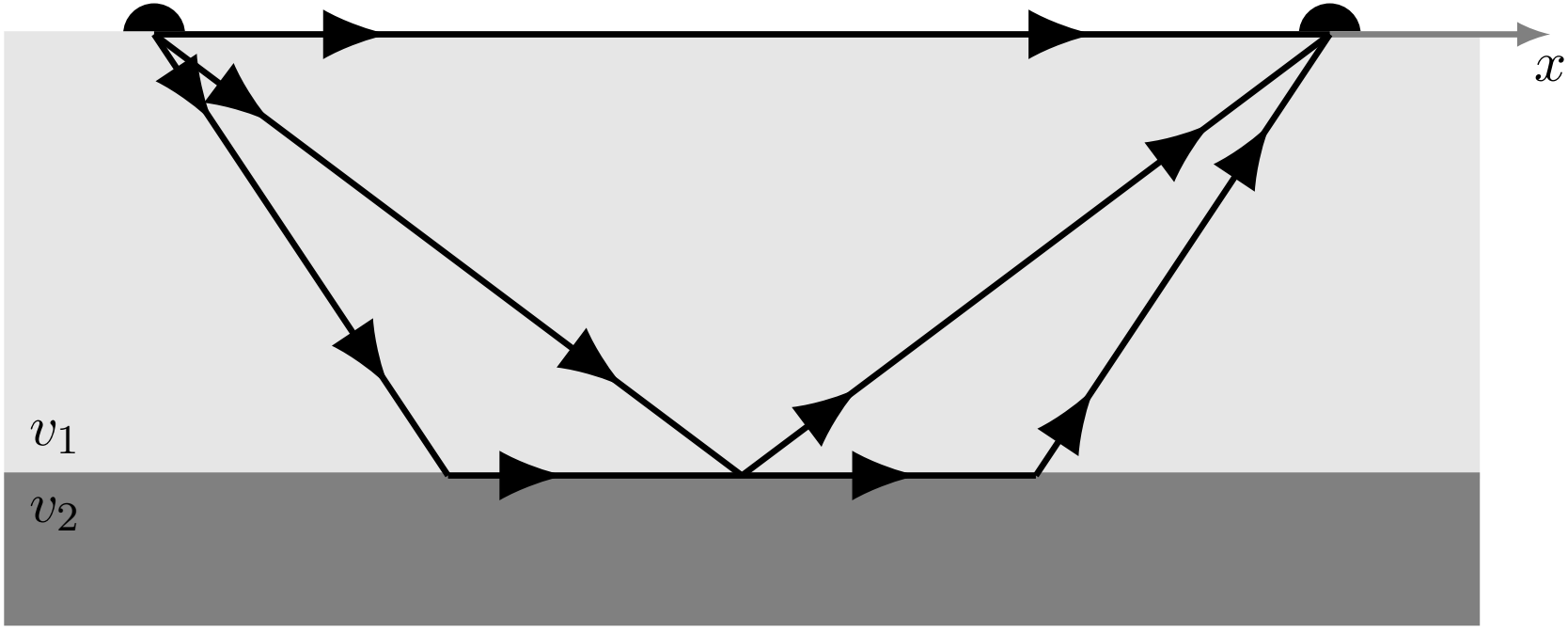
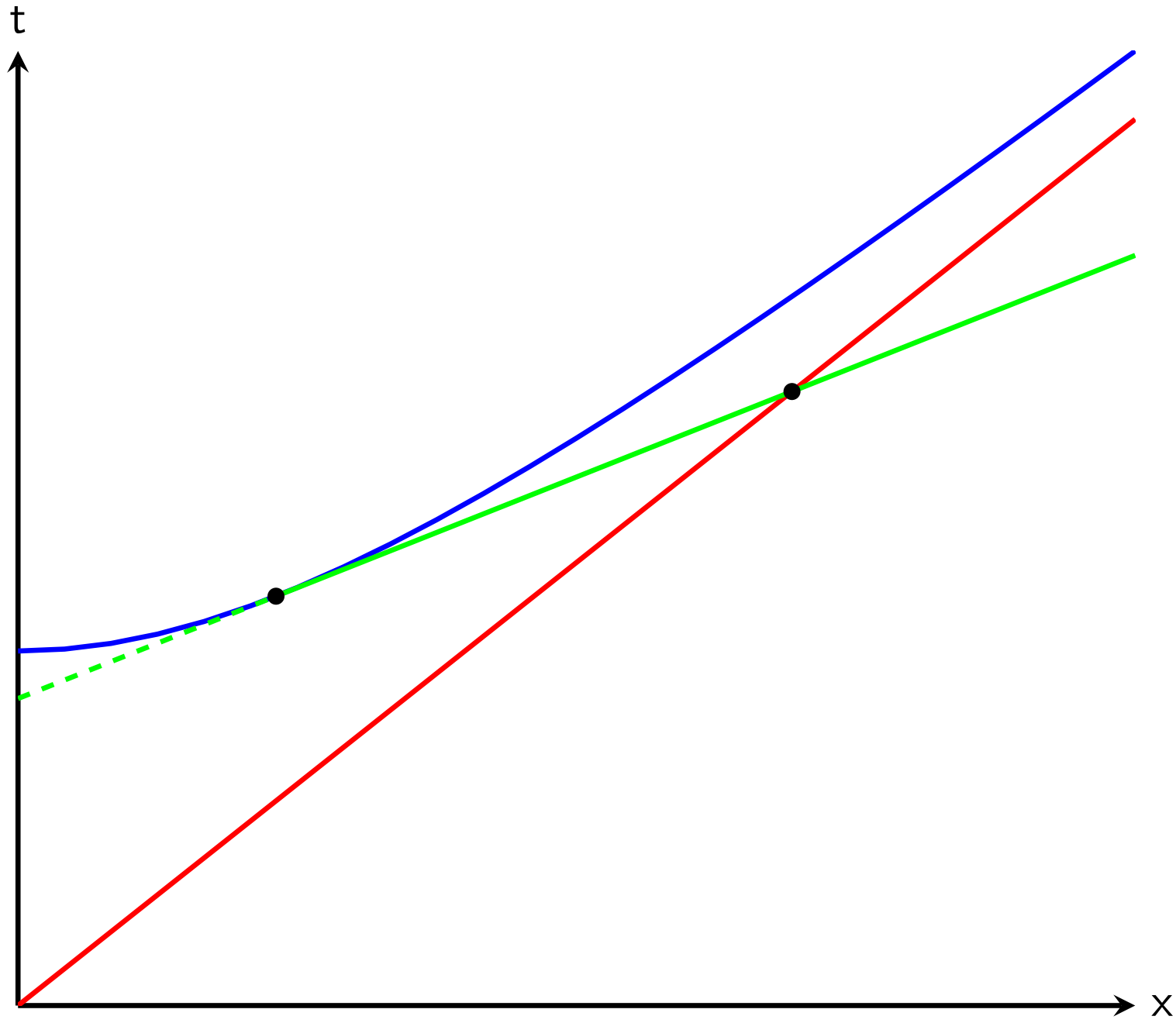
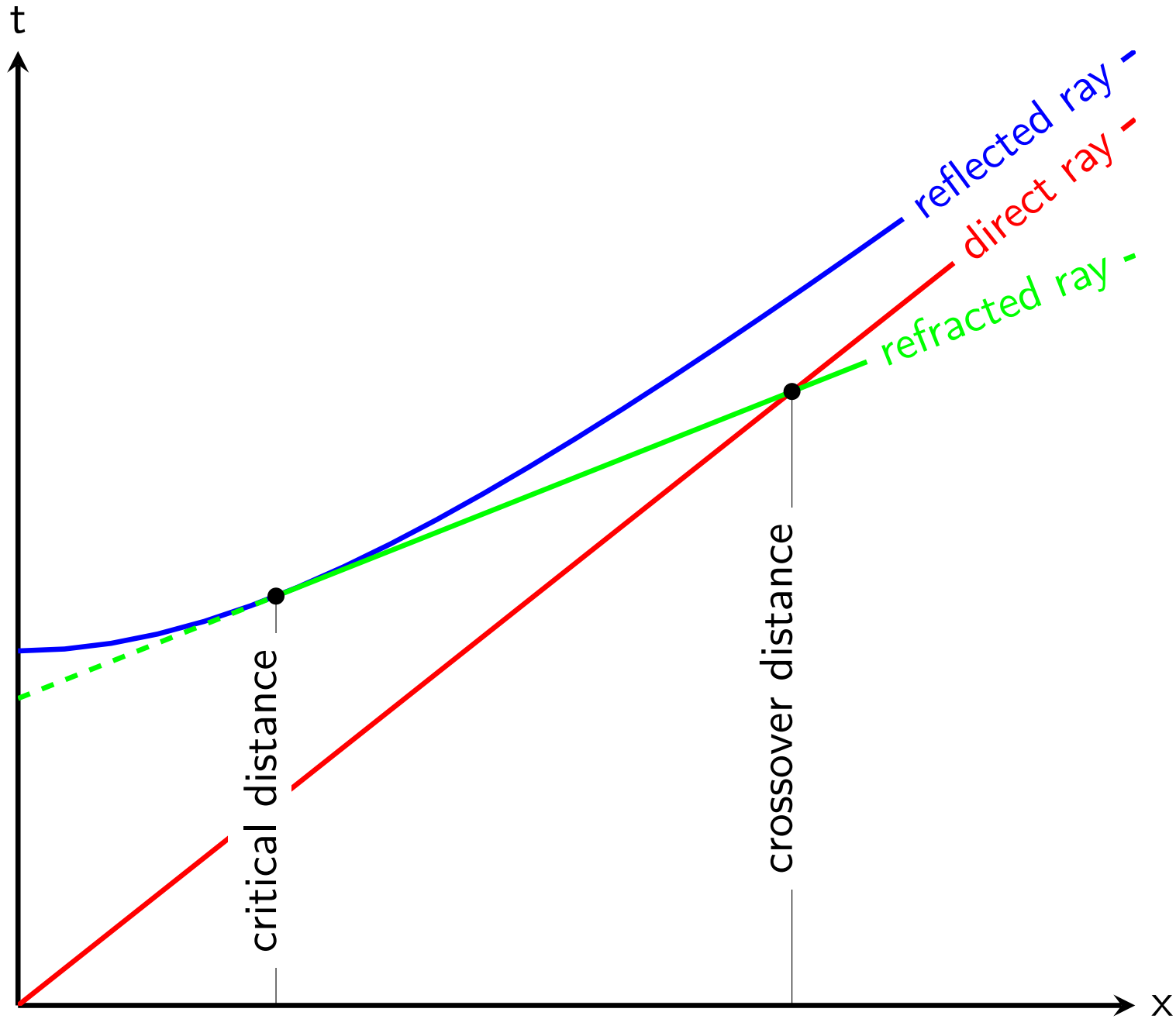
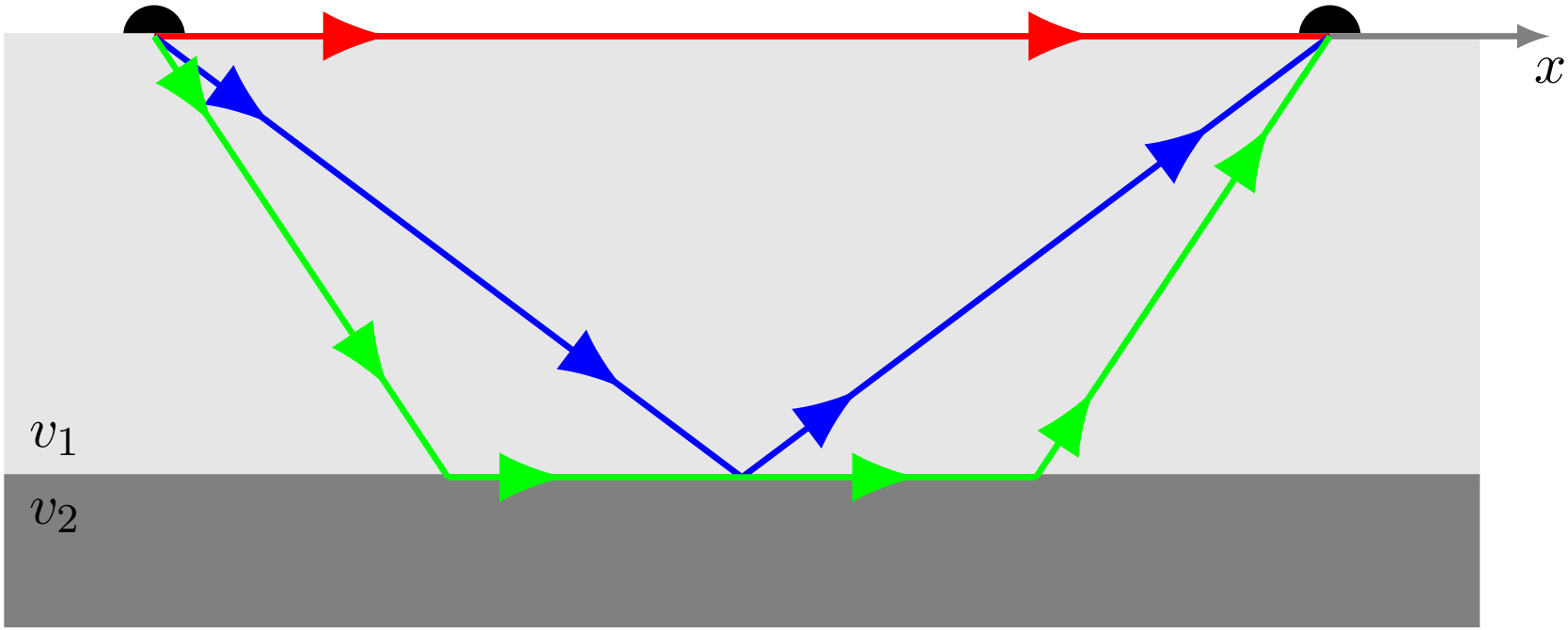

x
v_1
v_2


t
x


t
reflected ray
direct ray
refracted ray
critical distance
crossover distance
x


x
v_1
v_2

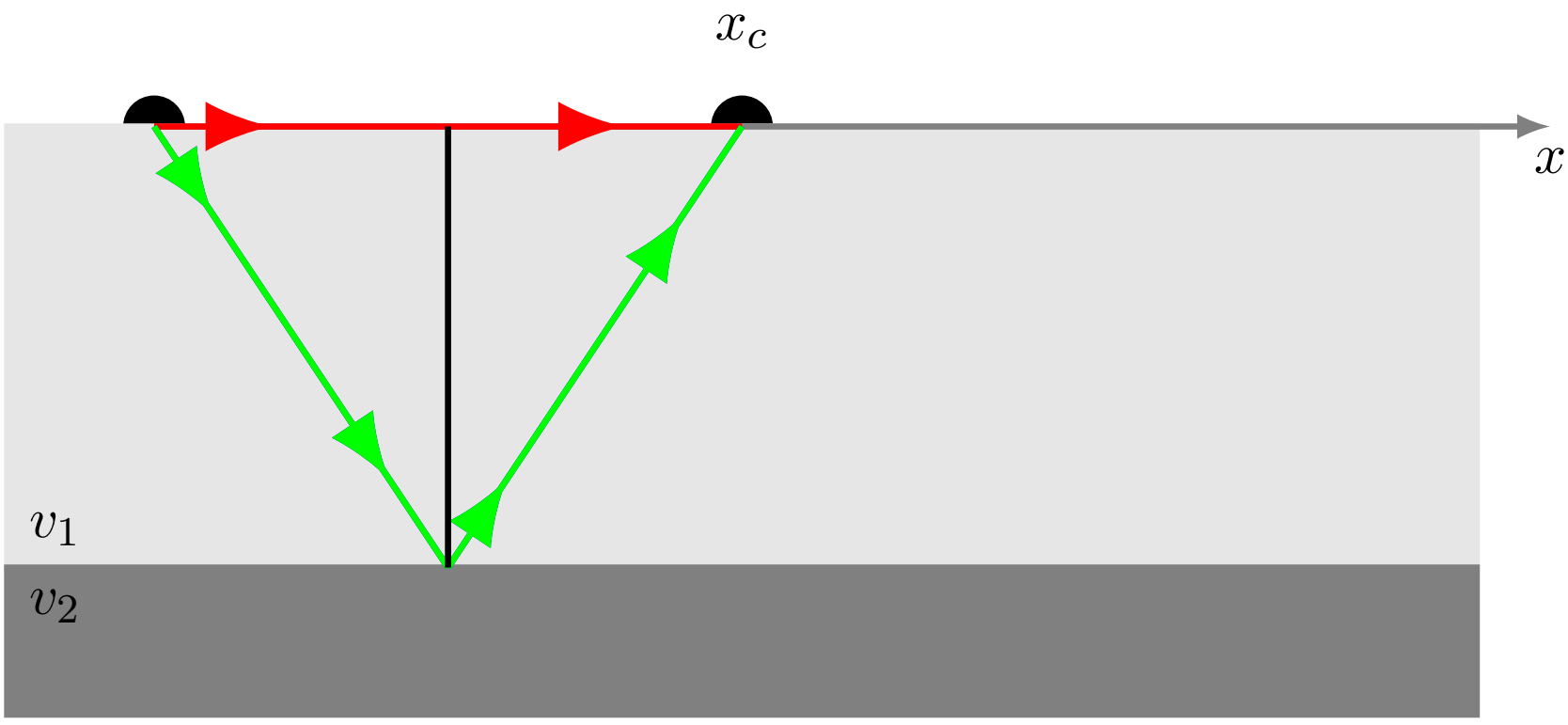
Try to...

Compute

critical distance

given

v_1, v_2, h


x_c
x
v_1
v_2

Solution

$$\frac{\sin i_1}{\sin i_2} = \frac{v_1}{v_2}$$

$$\sin i_c = \frac{v_1}{v_2}$$

$$x_c = 2 \cdot h \cdot \tan i_c$$

Solution

$$\frac{\sin i_1}{\sin i_2} = \frac{v_1}{v_2}$$

$$\sin i_c = \frac{v_1}{v_2}$$

$$x_c = 2 \cdot h \cdot \tan i_c$$

actually better to determine h from given x_c