$$\begin{array}{ccc} 1) & B_1^{\perp} & = B_2^{\perp} \end{array}$$

$$2) \, \boldsymbol{\varepsilon}_1 \mathbf{E}_1^{\perp} = \boldsymbol{\varepsilon}_2 \mathbf{E}_2^{\perp}$$

$$\begin{cases} 1) B_1^{\perp} = \mathbf{B}_2^{\perp} \\ 2) \varepsilon_1 \mathbf{E}_1^{\perp} = \varepsilon_2 \mathbf{E}_2^{\perp} \\ 3) \mathbf{B}_1^{\prime\prime} / \mu_1 = \mathbf{B}^{\prime\prime} / \mu_2 \\ 4) \mathbf{E}_1^{\prime\prime} = \mathbf{E}_2^{\prime\prime} \end{cases}$$

$$\mathbf{E}_{1}^{\prime\prime} = \mathbf{E}_{2}^{\prime\prime}$$

For light at normal incidence, we found:

$$R = \frac{(n_1 - n_2)^2}{(n_1 + n_2)^2}, \quad T = \frac{4n_1 n_2}{(n_1 + n_2)^2}$$

(For linear materials)

What gives a large transmission of light at normal incidence?

- A) When $v_1 >> v_2$
- B) When $v_2 >> v_1$
- C) When v is very different in the two media
- D) When v is nearly the *same* in the two media
- E) None of these/other/I'm confused/...