

An EM wave is normally incident on a boundary between two materials ($n_1 \ll n_2$). If the incident wave starts in **material 2**,

- A. most of the wave is reflected back; very little of the wave transmits through material 1
- B. some of the wave is reflected back; some of the wave transmits through material 1
- C. very little of the wave is reflected back; most of the wave transmits through material 1
- D. ???

An EM wave is normally incident on a boundary between two materials (n_1 is close to n_2). If the incident wave starts in **material 1**,

- A. most of the wave is reflected back; very little of the wave transmits through material 1
- B. some of the wave is reflected back; some of the wave transmits through material 1
- C. very little of the wave is reflected back; most of the wave transmits through material 1
- D. ???

ANNOUNCEMENTS

- Quiz 5 (next Friday)
 - Construct the expression for plane wave given a description
 - Both complex and real expressions
 - Combine two plane waves and describe the resulting superposed wave

Claim: For a wave heading towards a boundary between two media at an oblique angle, $\omega_I = \omega_R = \omega_T$.

- A. True
- B. False

Claim: For a wave heading towards a boundary between two media at an oblique angle, at the boundary,

$$\mathbf{k}_I \cdot \mathbf{r} = \mathbf{k}_R \cdot \mathbf{r} \neq \mathbf{k}_T \cdot \mathbf{r}.$$

A. True

B. False