A light rope (small m/L) is fused to a heavy rope (large m/L). If I wiggle the **light** rope,

A. most of the wiggles are reflected back; very few wiggles transmit through the heavy rope
B. some of the wiggles are reflected back; some of the wiggles transmit through the heavy rope
C. very few of the wiggles are reflected back; most of the wiggles transmit through the heavy rope
D. ???

A light rope (small m/L) is fused to a heavy rope (large m/L). If I wiggle the **heavy** rope,

A. most of the wiggles are reflected back; very few wiggles transmit through the light rope
B. some of the wiggles are reflected back; some of the wiggles transmit through the light rope
C. very few of the wiggles are reflected back; most of the wiggles transmit through the light rope
D. ???

How do the speed of the waves compare in the light rope (v_l) and heavy rope (v_H)?

A. $v_l < v_H$
B. $v_l = v_H$
C. $v_l > v_H$

ANNOUNCEMENTS

- Homework 9 posted (teams submit one project problem; same repository for all project problems)
- Quiz 5 on Friday March 24th (DC out of town; quiz for first 20-25 minutes of class)
- Topic of quiz given this Friday (likely, introduction to waves and some sketching)

For our reflected and transmitted waves, how many unknowns have we introduced?

$$\mathbf{E}_R = \widetilde{E_R}\, e^{i(k_R z - \omega_R t)} \hat{n}_R$$
$$\mathbf{E}_T = \widetilde{E_T}\, e^{i(k_T z - \omega_T t)} \hat{n}_T$$

A. 2
B. 4
C. 8
D. 12
E. None of the above

For our reflected and transmitted waves, how many unknowns have we introduced?

$$\mathbf{E}_R = \widetilde{E_R}\, e^{i(k_I z - \omega_I t)} \hat{n}_I$$
$$\mathbf{E}_T = \widetilde{E_T}\, e^{i(k_T z - \omega_I t)} \hat{n}_I$$

A. 2
B. 4
C. 8
D. 12
E. None of the above

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

A. most of the wave is reflected back; very little of the wave transmits through material 2
B. some of the wave is reflected back; some of the wave transmits through material 2
C. very little of the wave is reflected back; most of the wave transmits through material 2
D. ???

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. ???