Did you read the assigned sections from Giancoli? (16.1-4)

A) Yes, I did!

B) I read part/skimmed…

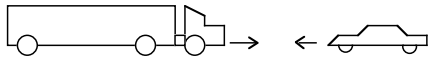
C) No but I really plan to soon!

D) No

E) Reading? What reading?

Remember:
1) Press & HOLD power ➔ blue *flash.*
2) Key in DC ➔ green *flash*

A moving van collides with a small car in a high-speed head-on collision. Crash!



During the impact, the truck exerts a force F_{TC} on the car and the car exerts a force F_{CT} on the truck.

Which statement about the *size* of these forces is true:

A: $F_{TC} = F_{CT}$ B: $F_{TC} > F_{CT}$ C: $F_{TC} < F_{CT}$

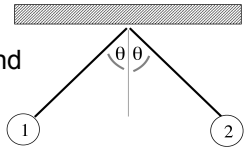
D: Not enough info given to decide/ don't know

2

2 socks are observed to attract each other.
Which, if any, of the first 3 statements MUST be true? (emphasis on MUST)

A) The socks both have a non-zero net charge of the same sign.
B) The socks both have a non-zero net charge of opposite sign.
C) Only one sock is charged; the other is neutral.
D) None of the preceding statements MUST be true.

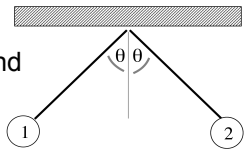
Two equal mass pith balls are charged, and hang on strings as shown:



What can we conclude about the *signs* of Q1 and Q2?

A: One is "+", the other is "-"
B: Both are "+" C: Both are "-"
D: Both must be the same charge (but we can't tell if they're both "+", or both "-")

Two equal mass pith balls are charged, and hang on strings as shown:



What can we conclude about the *magnitudes* of charges Q1 and Q2?

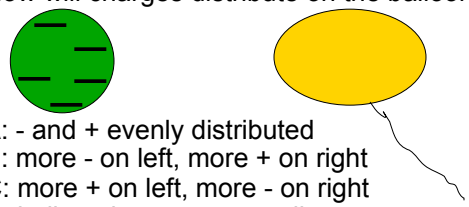
A: Both are equal
B: Not enough information to decide

We have 3 pith balls: 1, 2, and 3.
1 and 2 repel each other
2 and 3 repel each other.

What can we conclude?

A: 1 and 3 are opposite charges
B: 1 and 3 are the same sign charge (but 2 is opposite)
C: All 3 are the same sign
D: We cannot conclude any of the above, yet!

A Van deGraaf (green) is very negatively charged. A mylar balloon (gold) is nearby. How will charges distribute on the balloon?



A: - and + evenly distributed
B: more - on left, more + on right
C: more + on left, more - on right
D: balloon becomes overall -
E: balloon becomes overall +

A Van deGraaf is very negatively charged. A mylar balloon nearby *polarizes*, shown. What net force does the balloon feel?

A: Attracted to Van de Graaf
B: Repelled from Van de Graaf
C: Zero net force
D: Don't know/ not enough information.