String 1

M_1

String 2

M_2

Two masses are hanging from strings which have negligible mass. They are all stationary. What is the force due to String 2 on the mass M_2?

1) M_1g upward.
2) M_1g downward.
3) M_2g upward.
4) M_2g downward.
5) $M_1g + M_2g$ upward.
6) $M_1g + M_2g$ downward.
7) Zero.
1) None of the above.
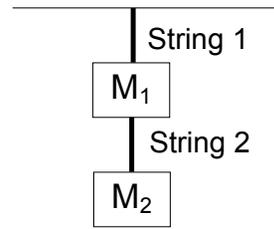
String 1

M_1

String 2

M_2

Two masses are hanging from strings which have negligible mass. They are all stationary. What is the force due to the mass M_2 on String 2?

1) M_1g upward.
2) M_1g downward.
3) M_2g upward.
4) M_2g downward.
5) $M_1g + M_2g$ upward.
6) $M_1g + M_2g$ downward.
7) Zero.
8) None of the above.

String 1

M_1

String 2

M_2
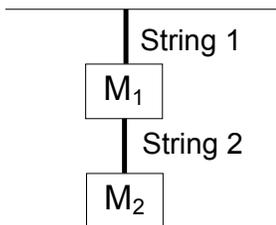
Two masses are hanging from strings which have negligible mass. They are all stationary. What is the force due to the mass M_1 on String 2?

1) M_1g upward.
2) M_1g downward.
3) M_2g upward.
4) M_2g downward.
5) $M_1g + M_2g$ upward.
6) $M_1g + M_2g$ downward.
7) Zero.
9) None of the above.
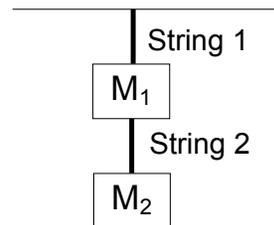
String 1

M_1

String 2

M_2

Two masses are hanging from strings which have negligible mass. They are all stationary. What is the force due to String 1 on the mass M_2?

1) M_1g upward.
2) M_1g downward.
3) M_2g upward.
4) M_2g downward.
5) $M_1g + M_2g$ upward.
6) $M_1g + M_2g$ downward.
7) Zero.
8) None of the above.

Forces and Reference Frames

You are a passenger in a car and not wearing your seat belt. Without changing its speed, the car makes a sharp left turn, and you find yourself colliding with the right-hand door. Which of the folllowing is correct?

1) Before and after your collision with the door, there is a rightward force pushing you towards the door.

2) Before your collision with the door, there is a rightward force pushing you towards the door but it goes away after the collision.

3) Starting at the time of your collision, the door exerts a leftward force on you.

4) Starting at the time of your collision, you exert a rightward force on the door.

5) Both (1) and (3) are correct.

6) Both (2) and (3) are correct.

7) Both (1) and (4) are correct.

8) Both (2) and (4) are correct.

9) Both (3) and (4) are correct.

10) None of the above are correct. (Hit key "0").