

Complex FBD Practice

1. A baseball player is sliding into home plate. As he slides to the right across the horizontal dirt surface, he is slowing down. Draw the FBD.
2. A heavy box is resting on the floor. A child pushes on the box to try to move it, but the box does not move as he pushes it. Draw the FBD.
3. A car is driving down the highway. To maintain a constant speed, the driver has to push on the gas pedal a little. Draw the FBD.
4. A car is parked on an inclined street. The car does not move. Draw the FBD.
5. A girl is pushing her sister in a snow sled up a snowy hill. (Despite being snow, there is still some friction present.) Draw the FBD.
6. A box is sliding down a rough ramp at a constant speed. Draw the FBD.
7. A homeowner is trying out new artwork for her walls. She presses a frame against the wall, keeping it still, to see what it looks like. (Note: she does not hold it from below but pushes it against the wall.) Draw the FBD.