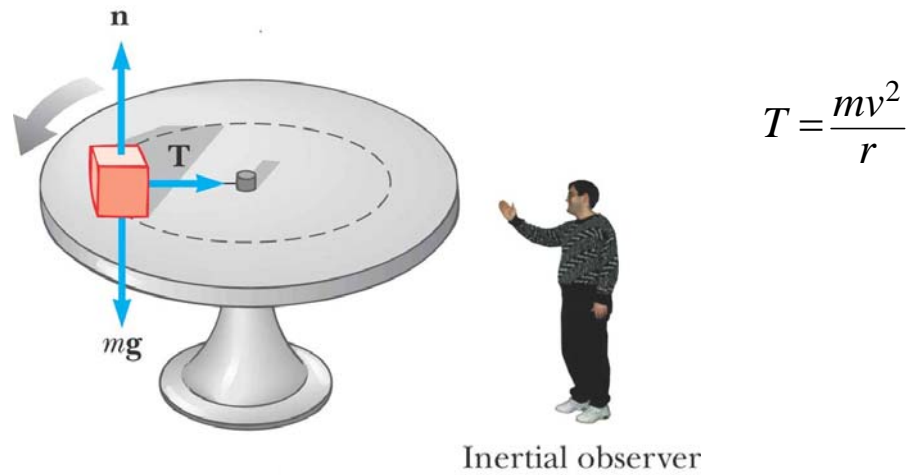
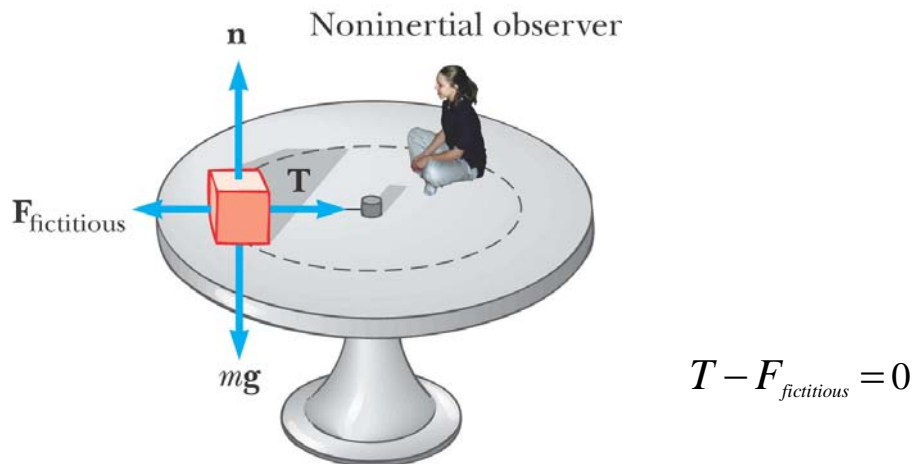


Rotating Reference Frame II (Inertial & Non-inertial Observers)



The inertial observer correctly reports that the block moves in a circular motion. He correctly states that this is a result of the inward force **T** exerted by the string on the block (**centripetal acceleration**).



The non-inertial observer correctly reports that the block does not appear to accelerate at all! She incorrectly assumes a fictitious force **F_{fictitious}** exists that acts outwardly and balances **T** so that the sum of the forces is equal to zero (**no acceleration**) in order to explanation why the string stays tight.