

21. An object of mass $m = 0.500$ kg is suspended from the ceiling of an accelerating truck as shown in Figure P6.21. Taking $a = 3.00$ m/s², find (a) the angle θ that the string makes with the vertical and (b) the tension T in the string.

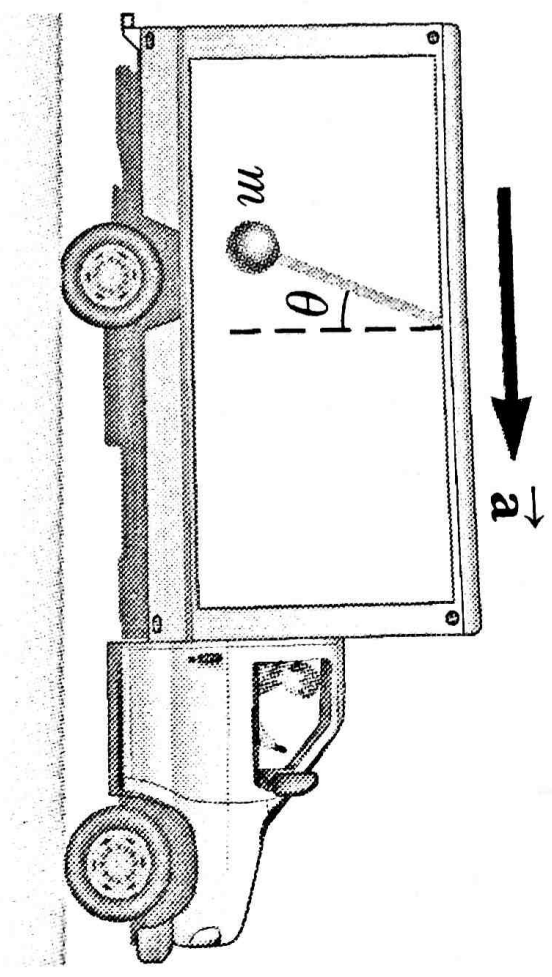


Figure P6.21