

30. A 74-kg tree surgeon rides a “cherry picker” lift (Fig. 5-34) to reach the upper branches of a tree. What force does the bucket of the lift exert on the surgeon when the bucket is (a) at rest; (b) moving upward at a steady 2.4 m/s; (c) moving downward at a steady 2.4 m/s; (d) accelerating upward at 1.7 m/s^2 ; (e) accelerating downward at 1.7 m/s^2 ?