77. Sample Problem 5-8 has a good treatment of the forces in an elevator. We apply Newton's second law (with $+y$ up)

$$N - mg = ma$$

where $m = 100$ kg and a must be estimated from the graph (it is the instantaneous slope at the various moments).

(a) At $t = 1.8$ s, we estimate the slope to be $+1.0\,\mathrm{m/s^2}$. Thus, Newton's law yields $N \approx 1100$ N (up).

(b) At $t = 4.4$ s, the slope is zero, so $N = 980$ N (up).

(c) At $t = 6.8$ s, we estimate the slope to be $-1.7\,\mathrm{m/s^2}$. Thus, Newton's law yields $N = 810$ N (up).