

88. We assume  $v_0 = 0$  and integrate the acceleration to find the velocity. In the graphs below (the first is the acceleration, like Fig. 2-35 but with some numbers we adopted, and the second is the velocity) we modeled the curve in the textbook with straight lines and circular arcs for the rounded corners, and literally integrated it. The intent of the textbook was not, however, to go through such an involved procedure, and one should be able to obtain a close approximation to the shape of the velocity graph below (the one on the right) just by applying the idea that constant nonzero acceleration means a linearly changing velocity.

