

28. From Table 2-1, $v^2 - v_0^2 = 2a\Delta x$ is used to solve for a . Its minimum value is

$$a_{\min} = \frac{v^2 - v_0^2}{2\Delta x_{\max}} = \frac{(360 \text{ km/h})^2}{2(1.80 \text{ km})} = 36000 \text{ km/h}^2$$

which converts to 2.78 m/s^2 .