



$$\Delta s = s_2 - s_1 = 4 \text{ km} = 4000 \text{ m}$$

Find the acceleration, a_s :
Constant accel. Kinematics 1 \rightarrow 2:

$$v_2^2 = v_1^2 + 2a_s \Delta s$$

$$a_s = \frac{v_2^2 - v_1^2}{2\Delta s}$$

$$= \underline{\underline{8.75 \text{ m/s}^2}}$$