

Warm-Up

If a car is accelerating at a rate of 3.5 m/s^2 , determine how long it takes to increase in speed from 20.4 m/s to 32.5 m/s .

$$\begin{aligned} a &= 3.5 \text{ m/s}^2 & \frac{\Delta s}{t} &= a \\ s_1 &= 20.4 \text{ m/s} & \frac{s_2 - s_1}{t} &= a \\ s_2 &= 32.5 \text{ m/s} & t &= \frac{s_2 - s_1}{a} \\ t &= ? & &= \frac{32.5 \text{ m/s} - 20.4 \text{ m/s}}{3.5 \text{ m/s}^2} \\ & & &= 3.5 \text{ s} \end{aligned}$$

Acceleration Worksheet

Attachments

Answers Extra Practice Acceleration WS.notebook