

A car traveled 550 km in 6.5 hours. What is its speed?



$$s = \frac{d}{t} = \frac{550 \text{ km}}{6.5 \text{ h}} = 84.62 \text{ km/h}$$

A car going 70 km/h steps on the gas to pass a truck. The car reaches 100 km/h in 6 sec. What is the acceleration?

$$a = \frac{v_f - v_i}{t} = \frac{100 \text{ km/h} - 70 \text{ km/h}}{6 \text{ sec}}$$

$$5 \text{ km/h/s} \leftarrow \frac{30 \text{ km/h}}{6 \text{ s}}$$