## Acceleration

2.2 a

## Problem 1

A car is driving with a speed of $110 \mathrm{~km} / \mathrm{h}$ when it slows for a monkey that is walking across the road. If the car slows to a speed of $15 \mathrm{~km} / \mathrm{h}$ in 25 seconds, what is the cars acceleration?

## Problem 2

A dog is walking through a forest when he sees a squirrel on the ground and chases after it. What is the dogs' initial speed if it takes him 2 seconds to reach a speed of $25 \mathrm{~m} / \mathrm{s}$ and he has an acceleration of $5.3 \mathrm{~m} / \mathrm{s}^{2}$ ?

## Problem 3

A rocket car driving with a velocity E of $2.3 \mathrm{~m} / \mathrm{s}$ accelerates with an acceleration of $6.3 \mathrm{~m} / \mathrm{s}^{2}$ for 0.6 minutes. What is the cars final velocity?

