



4. Scientists can determine the length of a giant squid by measuring the diameter of the suction-pod scars left on its prey. The formula  $L = 180D$  gives the length,  $L$ , of a squid in centimeters from the diameter,  $D$ , of its suction pods in centimeters.
- A sperm whale was found with suction-pod scars that measured 3.5 cm in diameter. How many metres long was the squid that made these scars?
  - The longest squid, to date, was found in New Zealand. It was 9.72 m long. What was the diameter of its suction pods?
5. Oil is being drained from a tank so that the amount of oil ( $R$  litres) remaining after a given time ( $t$  seconds) is given by the equation  $R = -10t + 500$ .
- How many litres of oil remain in the tank after 20 s?
  - How long does it take to drain 100L?