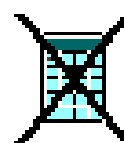
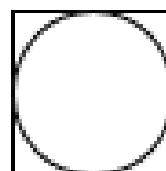


## National 5 Maths Homework 1

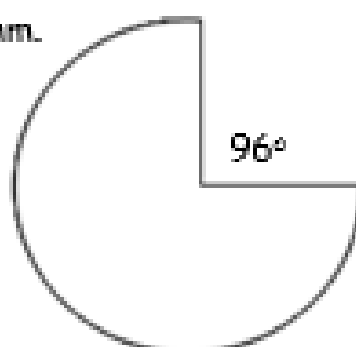
- 1) Calculate the volume and the surface area of a cube of side 5cm.



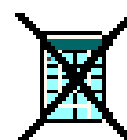
- 2) What is the area and circumference of this circle inside this square of side 8cm.



- 3) Calculate the length of the arc and area of this sector of a circle with radius 13mm.



- 4) How many degrees does the hour hand turn through between 1700 and 2100?



- 5) When a silk fan is opened it forms a sector of a circle with an angle of  $160^\circ$  at the centre. The distance from the centre to the edge of the fan is 18cm. Calculate the area of the material in the fan.



- 6) The famous McGlumpher earrings were bought in 1990 for £7400 and sold in 1997 for £12500. Find the percentage appreciation in value. (Give your answer correct to three significant figures)



- 6) A rectangular tank is 2m long, 1m broad and 50cm high. It is open at the top to collect rainwater.
- (a) How many litres of rainwater can it hold?
- (b) If the tank is quarter full of rainwater, what is the depth of water in it?

