

Measuring road signs

This task is about working out the circumference, circular and square area of a road sign.

The figure below shows a circular 50 km/h sign, punched out of a square sheet of metal of sides 60 cm. (Use $\pi = 3.14$ approx.)



a) What is the circumference of the outer circle? _____ cm

b) What is the area of the circular sign? _____ cm^2

What is the **total** area of sheet metal wasted in the four corners, after the sign is punched out?

c) _____ cm^2

The shaded ring has an inner diameter of 40 cm, and an outer diameter of 60 cm.

d) What is its area? _____ cm^2