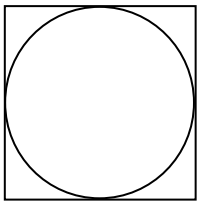
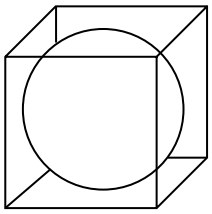
Round Things

David Ilsley d.ilsley@gmail.com



The circumference of a circle is $\pi/4$ times that of the enveloping square, i.e. $\pi/4 \times 4d$ or πd.

So is the area, i.e. $\pi/4\, d^2$.



The volume of a sphere is $\pi/6$ times that of the enveloping cube, i.e. $\pi/6\, d^3$.

So is the surface area, i.e. $\pi/6 \times 6d^2$ or πd^2.

These facts are probably more intuitive and easier to recall than the various formulae based on radius.