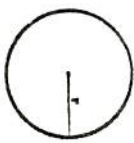


FOIRMIÚ TOMHAIS

FAID CUARANNA

Ciorcal, gath r

Fad = $2\pi r$

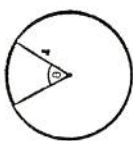


MENSURATION FORMULAE

Length of curves

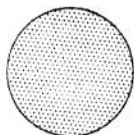
Slua ciorcal, gath r

Fad = $r\theta$ (θ i raidian)



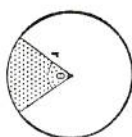
Dioscá, gath r

Achar = πr^2



Teascóg diosca, gath r

Achar = $\frac{1}{2}r^2\theta$ (θ i raidian)



Circle, radius r
Length = $2\pi r$

Arc of circle, radius r
Length = $r\theta$ (θ in radians)

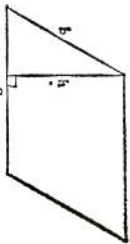
Disc, radius r
Area = πr^2

Sector of a disc, radius r
Area = $\frac{1}{2}r^2\theta$, (θ in radians)

ACHAIR DROMCHLAÍ

Comhleannharáin

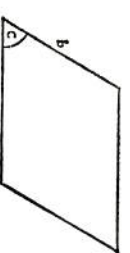
Achar = ah



AREAS OF SURFACES

Parallelograms

Achar = $ab \sin C$



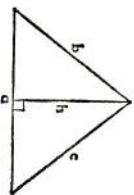
Area = ah

Triantáin

Achar = $\frac{1}{2}ah$

= $\sqrt{s(s-a)(s-b)(s-c)}$

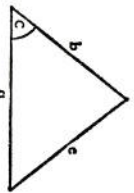
áit a bhfuil $s = \frac{a+b+c}{2}$



Achar = $\frac{1}{2}ab \sin C$

Triangles

Area = $ab \sin C$



Area = $\frac{1}{2}ah$

= $\sqrt{s(s-a)(s-b)(s-c)}$

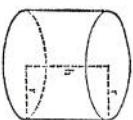
where $s = \frac{a+b+c}{2}$

Area = $\frac{1}{2}ab \sin C$

Cylinder, radius r

Area of curved surface = $2\pi rh$

Volume = $\pi r^2 h$



DROMCHLAÍ AGUS TOIRTEANNA

Sorcóir, gath r

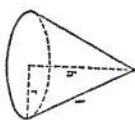
Achar an dromchla charraigh = $2\pi rh$

Toirt = $\pi r^2 h$

Cone, radius r

Curved surface area = πrl

Volume = $\frac{1}{3}\pi r^2 h$



SURFACES AND VOLUMES

Cón, gath r

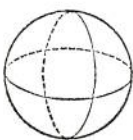
Achar an dromchla charraigh = πrl

Toirt = $\frac{1}{3}\pi r^2 h$

Sféar, gath r

Achar an dromchla = $4\pi r^2$

Toirt = $\frac{4}{3}\pi r^3$



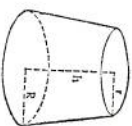
Sphere, radius r

Area of surface = $4\pi r^2$

Volume = $\frac{4}{3}\pi r^3$

Frustram chóin

Toirt = $\frac{1}{3}\pi h(R^2 + Rr + r^2)$



Frustrum of a cone

Volume = $\frac{1}{3}\pi h(R^2 + Rr + r^2)$

$\pi \approx 3.142$	$\frac{1}{\pi} \approx 0.3183$	$\sqrt{\pi} \approx 1.773$	$\frac{2}{3}\pi \approx 4.189$
$\log_{10} \pi \approx 0.4971$	$\log_{10} \frac{1}{\pi} \approx 1.5029$	$\log_{10} \sqrt{\pi} \approx 0.2486$	$\log_{10} \frac{2}{3}\pi \approx 0.6221$