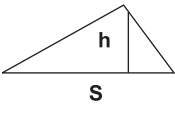
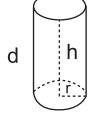
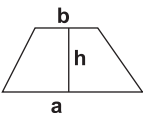
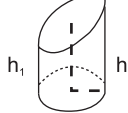
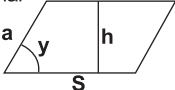

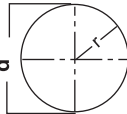

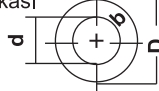
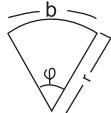
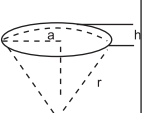
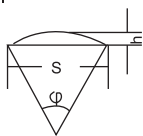
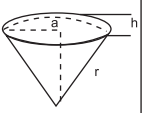
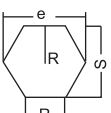
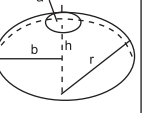

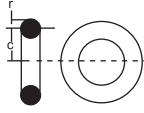
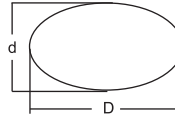




ALAN ve HACİMLER

	Alanlar F	Cisim	Hacim V, Toplam yüzey O, Yanal Yüzey M, Çevre U Taban Alanı G
		Kare Sütun, dikdörtgen sütun prizma	$V = G.h; M = U.h; O = M + 2G$
Üçgen 	$F = \frac{s.h}{2}$	Silindir 	$V = \frac{\pi d^2}{4} h = 0.785 d^2 h = \pi r^2 h$ $M = \pi d h = 2 \pi r h$ $O = \pi d (\frac{d}{2} + h)$
Trapez 	$F = \frac{a+b}{2} .h$	Kesik Silindir 	$V = 11r^2 h$ $M = 2\pi r h$ $h = \frac{1}{2} (h_1 + h_2)$
Paralelkenar 	$F = s.h = s.a \sin y$ $u = (a+s) . 2$	Koni 	$V = \frac{1}{3} Gh = \frac{\pi d^2 h}{12} = 0.2618 d^2 h = \frac{\pi}{3} r^2 h$ $M = \frac{\pi d s}{2} = \frac{\pi d}{4} \sqrt{d^2 + 4h^2} = 0.785 d \sqrt{d^2 + 4h^2}$ $M = \pi s r = \pi r \sqrt{r^2 + h^2}$ $S = \sqrt{r^2 + h^2}$
Daire 	$F = \frac{\pi d^2}{4} = 0.785 d^2 = \pi . r^2$ $Çevre U = \pi d$ $d = \sqrt{\frac{4F}{\pi}} = 1.127 \sqrt{F}$	Kesik Koni 	$V = \frac{\pi h}{12} (D^2 + Dd + d^2) = 0.2618 h (D^2 + dD + d^2)$ $V = \frac{\pi}{3} h (r_1^2 + r_2^2 + r_1 r_2)$ $M = \frac{\pi (D+d)s}{2}$ $M = \pi s (r_1 + r_2)$ $S = \sqrt{(r_1 + r_2)^2 + h^2}$
Daire Halkası 	$F = \frac{\pi}{4} (D^2 - d^2) = \frac{\pi}{2} (D+d) t$	Küre d küre çapı	$V = \frac{\pi d^3}{6} = 0.5236 d^3 = \frac{4}{3} \pi r^3$ $O = \pi d^2 = 4 \pi . r$
Daire Dilimi 	$F = \frac{\pi r^2 \phi}{360} = 0.008727 r^2 \phi = \frac{b.r}{2}$ $Yay Boyu b = \frac{\pi r \phi}{180} = 0.0175 r \phi$	Küre parçası 	$V = \frac{\pi h}{5} (3a^2 + h^2) = \frac{\pi h^2}{3} (3r - h)$ $M = 2 \pi r h = \pi (a^2 + h^2)$
Daire Parçası 	$F = \frac{r^2}{2} \cdot \frac{\pi \phi}{180} \sin \phi = \frac{h}{6s} (3h^2 + 4s^2)$ $Kesen boyu s = 2r \sin \frac{\phi}{2} = 2 \sqrt{h(2r - h)}$ $Yay yüksekliği h = r (1 - \cos \frac{\phi}{2}) = \frac{s}{2} \tan \frac{\phi}{4}$ $= r - \sqrt{r^2 - \frac{s^2}{2}}$ $= 2r \sin^2 \frac{\phi}{2}$	Küre dilimi 	$V = \frac{2 \pi r^2 h}{3} = 2.0944 r^2 h$ $O = \pi r (2h + a)$
Düzgün Altıgen 	$F = \frac{\sqrt{3}}{2} . s^2 = 0.866 s^2; F = \frac{\sqrt{3}}{2} R^2 = 2.598 R^2$ $Köşeböyü e = \frac{2s}{\sqrt{3}} = 1.1547s; R = 0.577s$ u=6.R	Kesik küre parçası 	$V = \frac{\pi h}{6} (3a^2 + 3b^2 + h^2)$ $M = 2 \pi r h$ $r = \text{Küre yarı çapı}$
Sekizgen 	$F = 0.828 S^2$, Köşeböyü e = 1.0824 s	Silindir Halkası 	$V = \frac{\pi}{4} Dd^2 = 2.46 Dd^2$ $V = 2 \pi^2 c r^2$ $O = \pi^2 D . d = 9.896 Dd$ $O = 4 \pi^2 c r$
Elips 	$F = \frac{\pi}{4} Dd = 0.785 D d$ $U = \frac{\pi}{2} (D + d) = 1.5709 (D + d)$	Dairesel fiç D Gövdenin en geniş çapı d Tabanların çapı H Tabanlararası	$V = \frac{\pi h}{12} (2D^2 + d^2) = 0.26 h (2D^2 + d^2)$
Alanlar için guldin teorisi 	Döner şeklin alanı [Döndürülen yay boyu] x [Yay ağırlık merkezinin çizdiği daire yayı uzunluğu] $F = 2 \pi r L$	Cisimler için Guldin teorisi 	Döndürülen cismin hacmi [Döndürülen alan] x [Alan ağırlık merkezinin çizdiği daire yayı uzunluğu] $V = 2 \pi r F$