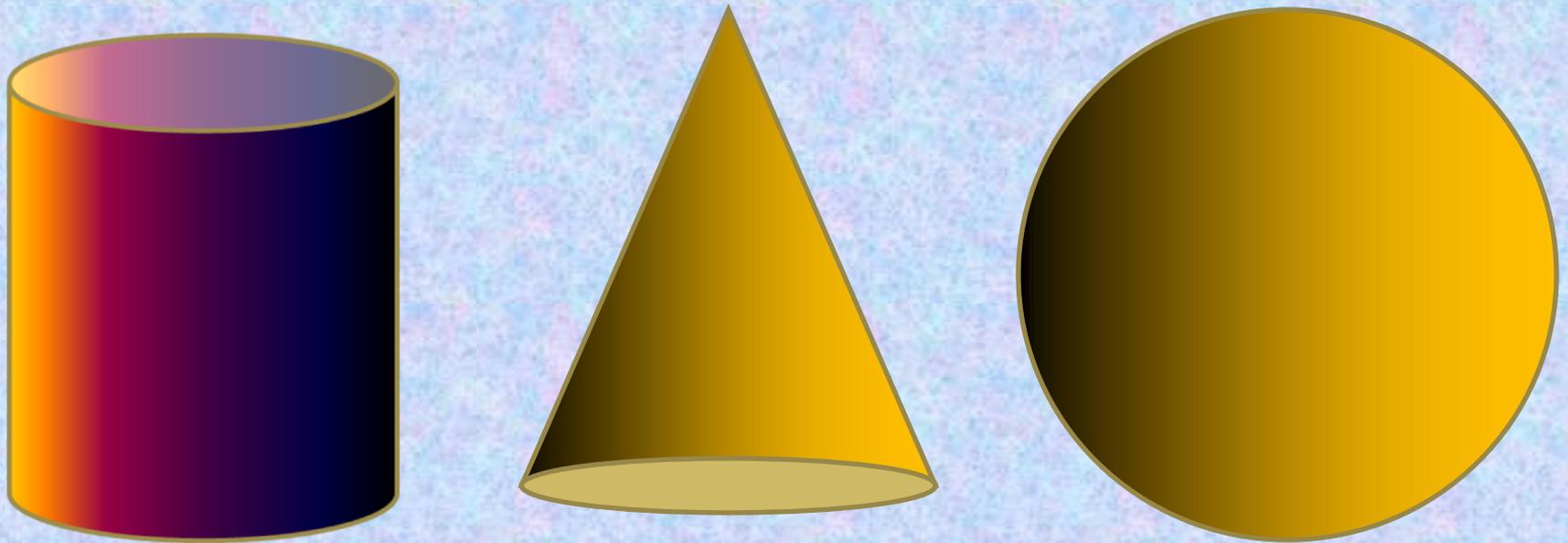


MAVZU:
SODDA AYLANMA
JISMLAR.



Parallel ko'chirish bilan ustma-ust loylashadigan va bitta tekislikda yotmaydigan ikki doiradan va bu doiralarning mos huqtalarini tutashtiruvchi hamma parallel to'g'ri chiziq kesmalaridan tashkil topgan jism **silindr** deyiladi.

Kohus deb shunday jismga aytiladiki, shu doira tekisligida yotmagan huqta –konusning uchidan va konusning uchini asosining hamma huqtalari bilan tutashtiruvchi kesmalardan iborat bo'ladi.

Fazoning berilgan huqtadan berilgan masofadan katta bo'lmagan uzoqlikda yotgan hamma huqtalaridan iborat jism **shar** deyiladi.

Konusning asosiga parallel va konusni kesib o'tuvchi tekislik undan kichikroq konisni kesib ajratadi. Konusning qolgan qismi **kesik konus** deyiladi

Silindr

Silindrning yon sirti yuzi $S=2\pi RH$

Silindrning to'la sirti $S=S_{YON} + 2S_{ASOS} =$
 $=2\pi RH + 2\pi R^2 = 2\pi R(H+R)$

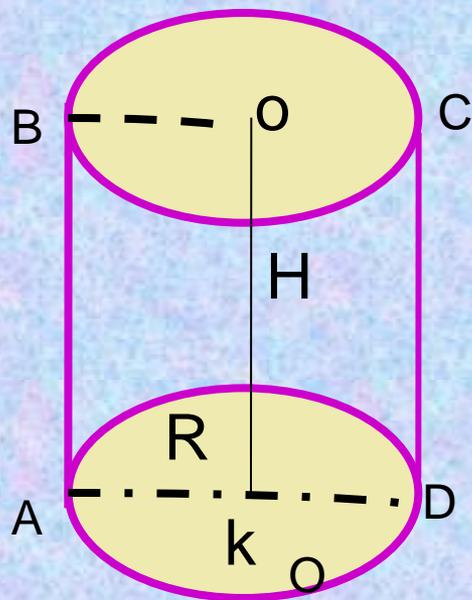
Silindrning hajmi $V=\pi R^2 H$

S – sirt yuzi

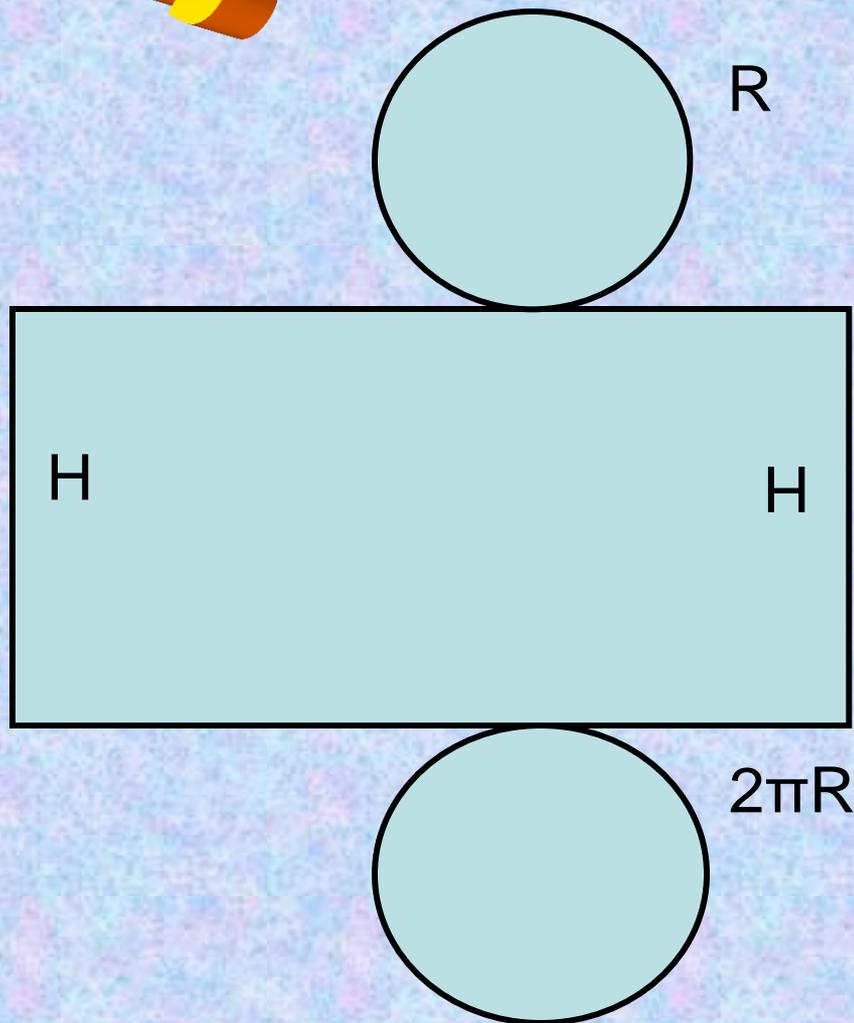
R – asos aylanasing radiusi

H – silindrning balandligi

V – silindrning hajmi

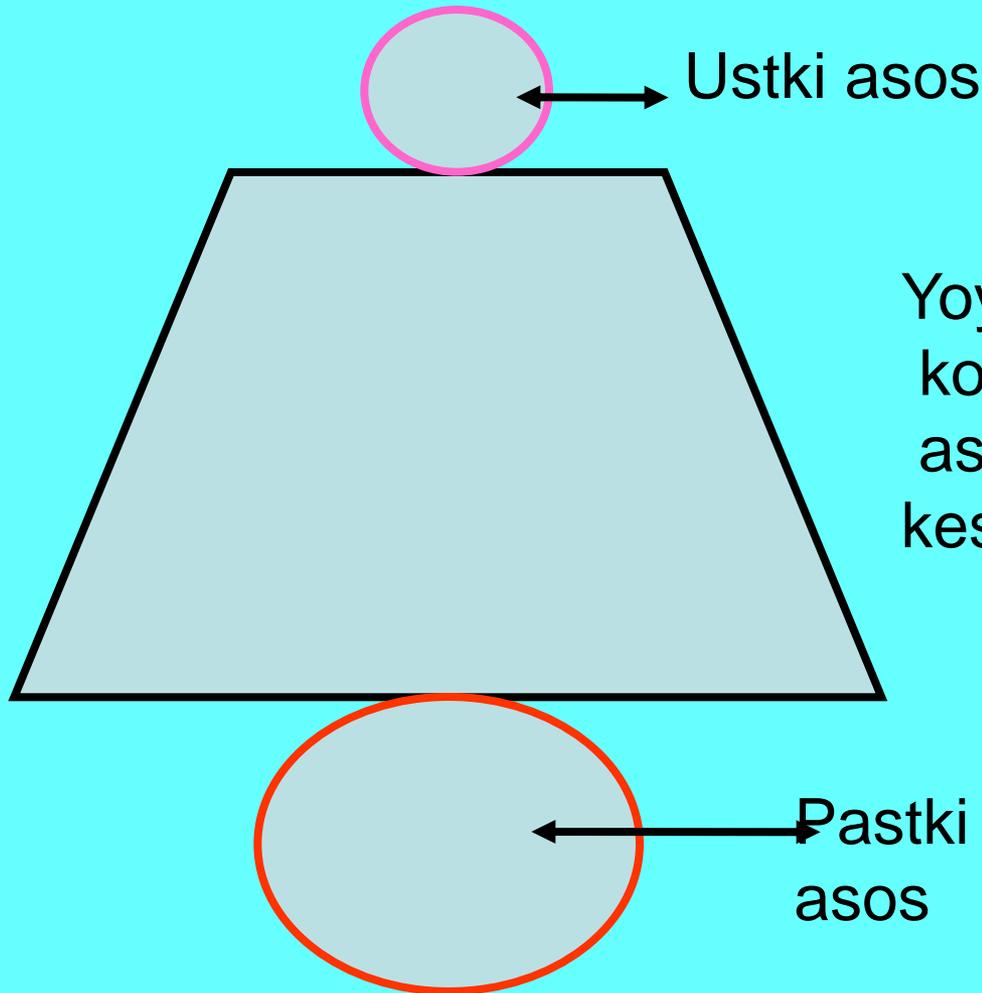


SILINDRNING YOYILMASI



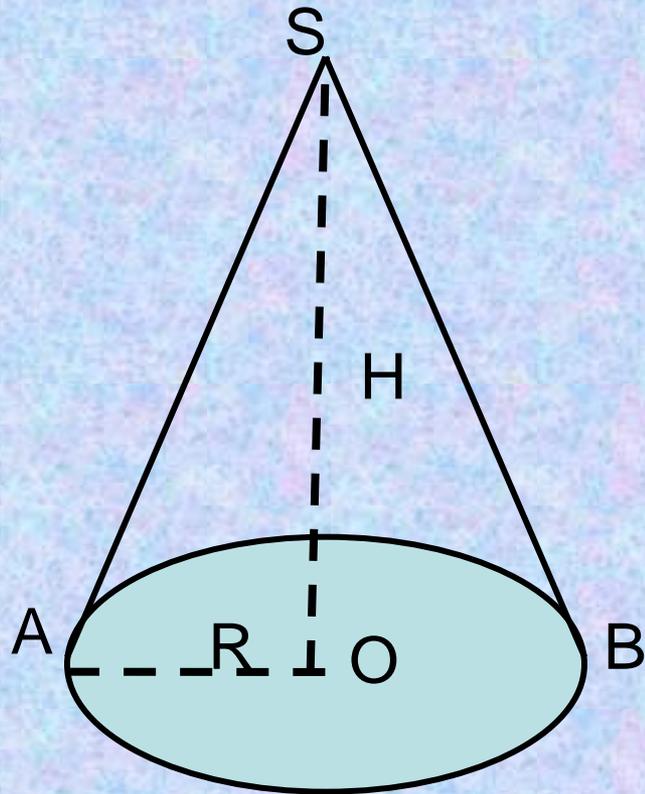
Yoyilmadagi doiralar silindr ning asoslari , to'g'ri to'rtbur chak esa silindrning yon sirti. Bu to'g'ri to'rtburchakning bo'yi - silindr balandligidan, asosi - silindr asosining aylanasi uzunligidan iborat.

kesik konus yoyilmasi



Yoyilmasidagi ikki doira kesik konusning ustki va pastki asoslari, trapetsiya esa kesik konusning yon sirti

KONUS



Konusning yon sirti yusi $S = \pi RL$

K
O
n
u
s

Konusning to'la sirti
 $S = \pi RL + \pi R^2$

Konusning hajmi $V = 1/3 \pi R^2 H$

S - sirt yuzi

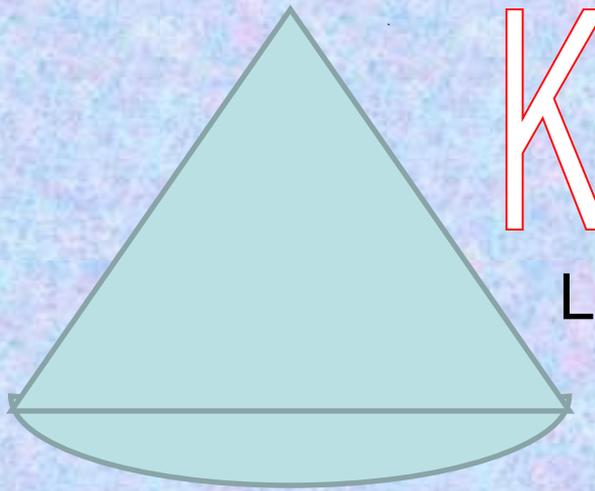
R - konus asosining radiusi

L - konus yasovchisi

V - konus hajmi

H - balandligi

Konus yoyilmasi

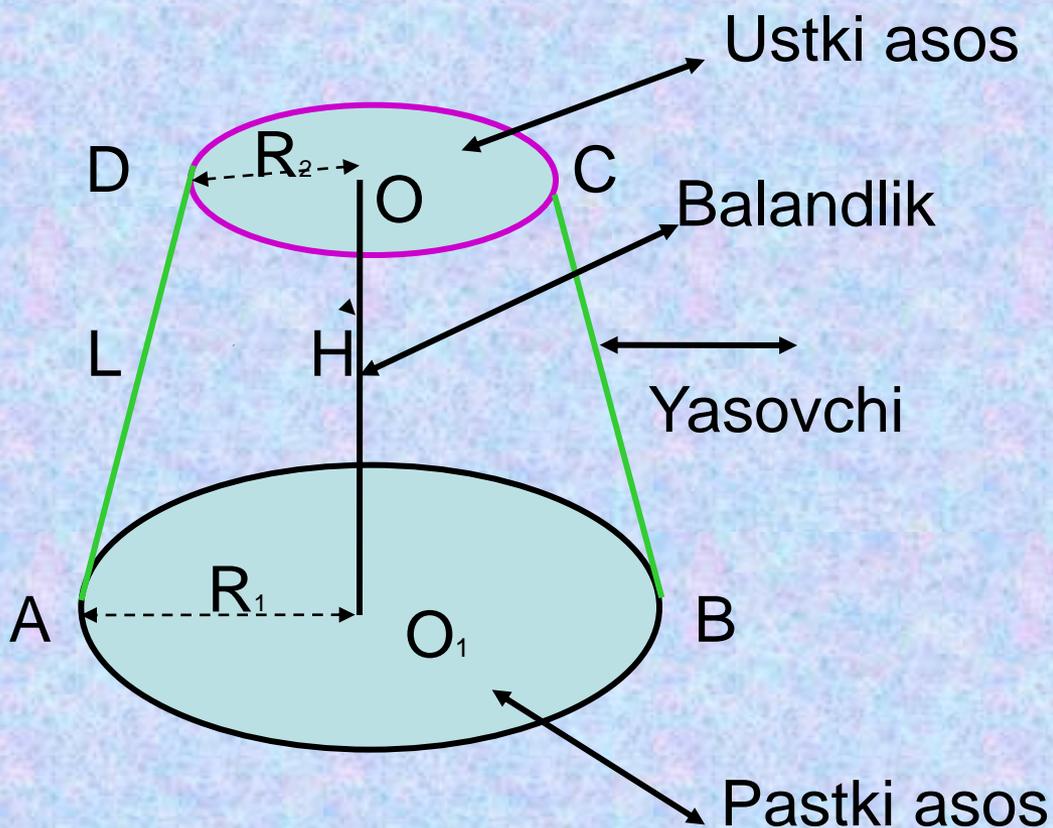


$2\pi R$

L- Konus yasovchisi

R- konus radiusi

KESIK KONUS



$$S_{YON} = \pi(R_1 + R_2)$$

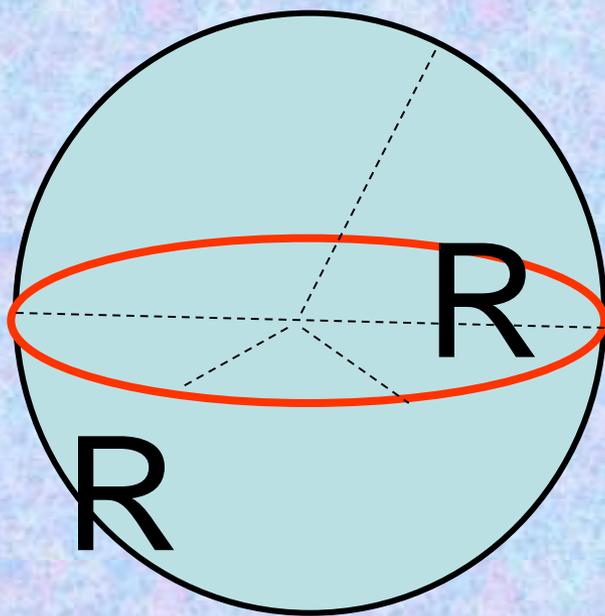
$$S_{TO'LA} = \pi(R_1^2 + R_2^2 + L(R_1 + R_2))$$

$$V = \frac{1}{3}\pi H(R_1^2 + R_1 \cdot R_2 + R_2^2)$$

R_1 - pastki asos radiusi

R_2 - ustki asos radiusi

SHAR



Shar sirti

$$S=4\pi R^2$$

Sharning hajmi

$$V=4/3\pi R^3$$

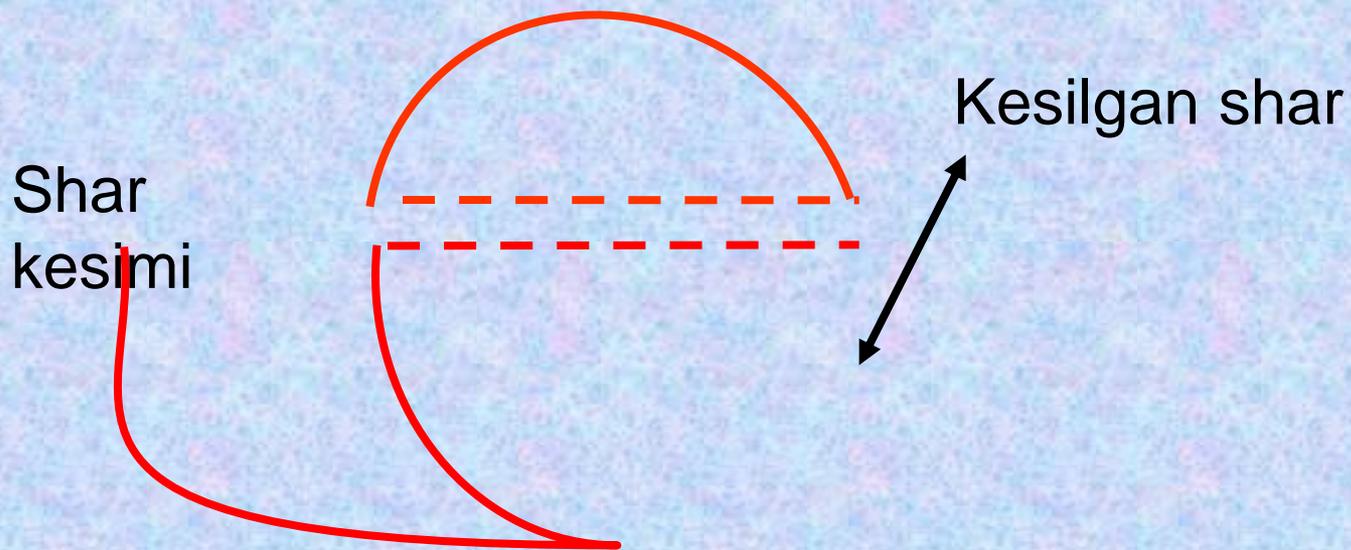
S - sirti

V - hajmi

R – radius

$\pi \approx 3,14\dots$

SHARNING TEKISLIK BILAN KESIMI



Sharning kesimi doira shaklida bo'ladi.

Krossvorddagi shartlar

1. Ikki nuqta orasidagi masofa.
2. Konusning uchidan uning asosiga tushirildan perpendikulyar
3. Matematikaning bir bo'limi.
4. To'g'ri burchak ostida kesishuvchi to'g'ri chiziglar.
5. Aylana markazidan o'tuvchi to'g'ri chiziq
6. Berilgan nuqtadan bir xil uzoqlikdagi huqtalar to'plami
7. Isbot talab qiladigan tushuncha
8. Sodda aylana jismlaridan biri.
9. Yon sirti teng yonli uchburchak bo'ldan aylanma jism.
10. Sharning chegarasi nima deyiladi.

