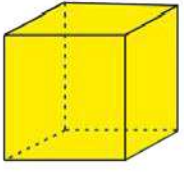
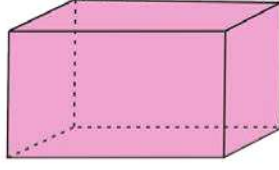


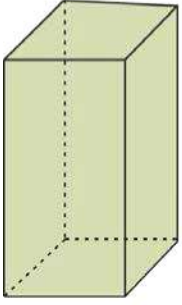
# DİK PRİZMA



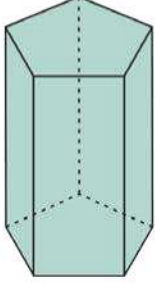
KÜP



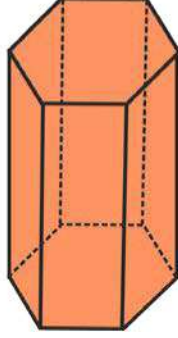
DİKDÖRTGEN  
DİK PRİZMA



KARE  
DİK PRİZMA

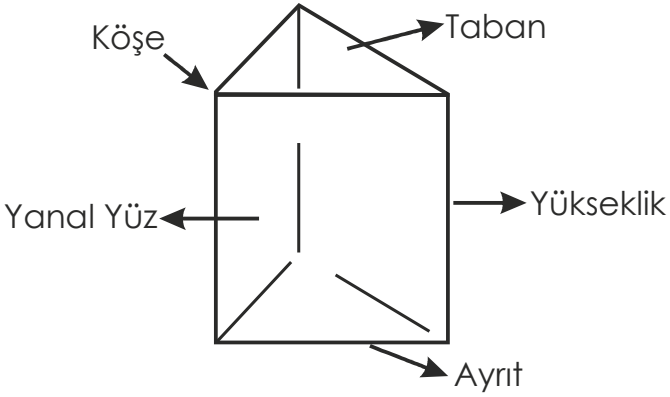


BEŞGEN  
DİK PRİZMA



ALTİGEN  
DİK PRİZMA

## PRİZMANIN TEMEL ELEMANLARI



### ÜÇGEN DİK PRİZMANIN:

2 tane TABANI  
6 tane KÖŞESİ ( $n \times 2$ )  
9 tane AYRITI ( $n \times 3$ )  
3 tane YANAL YÜZÜ ( $n$ )  
5 tane YÜZÜ vardır.

### KARE DİK PRİZMANIN:

2 tane TABANI  
8 tane KÖŞESİ ( $n \times 2$ )  
12 tane AYRITI ( $n \times 3$ )  
4 tane YANAL YÜZÜ ( $n$ )  
6 tane YÜZÜ vardır.

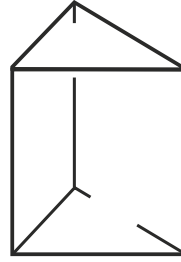
### BEŞGEN DİK PRİZMANIN:

2 tane TABANI  
10 tane KÖŞESİ ( $n \times 2$ )  
15 tane AYRITI ( $n \times 3$ )  
5 tane YANAL YÜZÜ ( $n$ )  
7 tane YÜZÜ vardır.

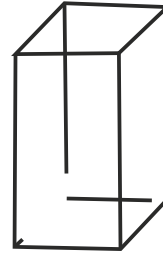
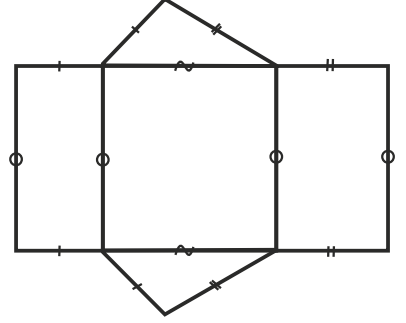
### ALTİGEN DİK PRİZMANIN:

2 tane TABANI  
12 tane KÖŞESİ ( $n \times 2$ )  
18 tane AYRITI ( $n \times 3$ )  
6 tane YANAL YÜZÜ ( $n$ )  
8 tane YÜZÜ vardır.

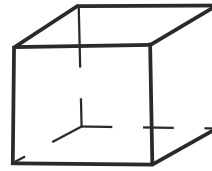
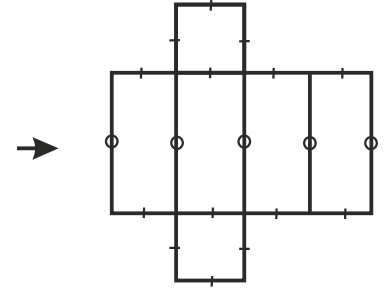
## PRİZMALARIN AÇINIMI



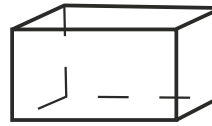
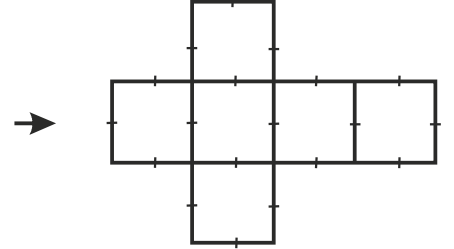
ÜÇGEN DİK PRİZMA



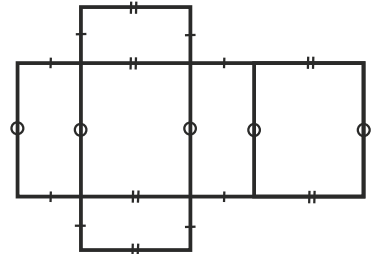
KARE DİK PRİZMA



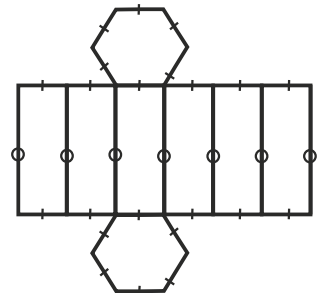
KÜP



DİKDÖRTGEN DİK PRİZMA

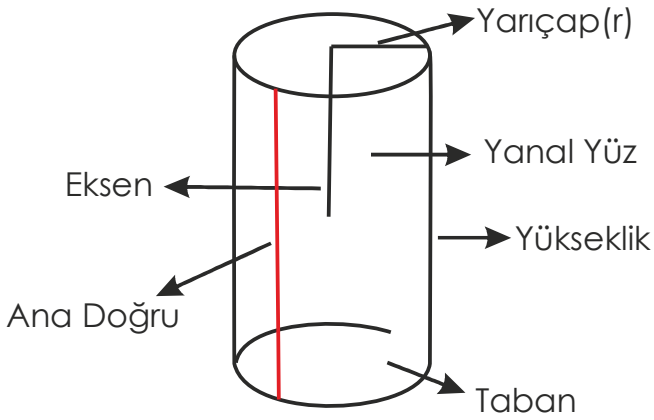


ALTİGEN DİK PRİZMA

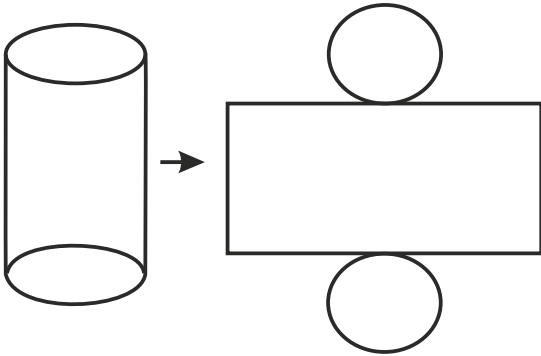


# DİK DAİRESEL SİLİNDİR

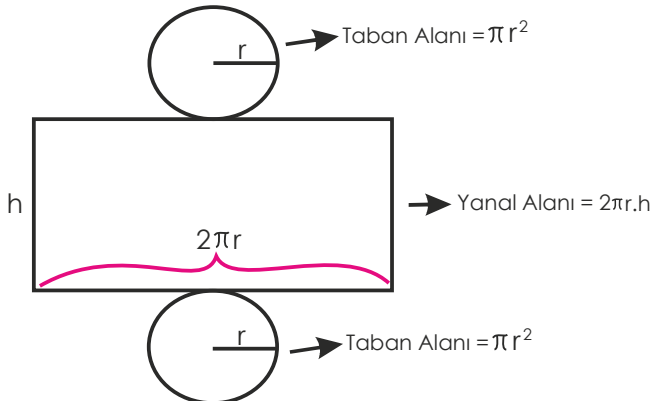
## SİLİNDİRİN TEMEL ELEMANLARI



## SİLİNDİRİN AÇINIMI



## SİLİNDİRİN YÜZEY ALANI



$$\text{SİLİNDİRİN YÜZEY ALANI} = 2\pi r \cdot h + 2\pi r^2$$

## ÖRNEK

Taban yarıçapı 4 cm ve yüksekliği 10 cm olan dik dairesel silindirin yüzey alanını bulalım. ( $\pi = 3$ )

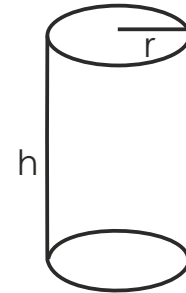


## ÇÖZÜM

Taban Alanı =  $\pi r^2$   
 $= 3 \cdot 4^2 = 3 \cdot 16 = 48$   
Yanal Alanı =  $2\pi r \cdot h$   
 $= 2 \cdot 3 \cdot 4 \cdot 10 = 240$   
Taban Alanı =  $\pi r^2$   
 $= 3 \cdot 4^2 = 3 \cdot 16 = 48$

$$\text{Yüzey Alanı} = 48 + 48 + 240 = 336 \text{ cm}^2$$

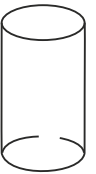
## SİLİNDİRİN HACMI



$$\text{Hacim} = \text{Taban Alanı} \times \text{Yükseklik}$$
$$V = \pi r^2 \cdot h$$

## ÖRNEK

Taban yarıçapı 4 cm ve yüksekliği 10 cm olan dik dairesel silindirin hacmini bulalım. ( $\pi = 3$ )

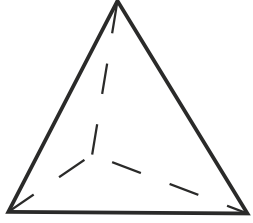


## ÇÖZÜM

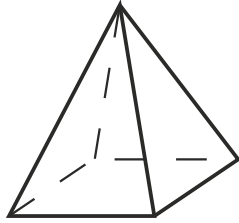
$$\text{Hacim} = \text{Taban Alanı} \times \text{Yükseklik}$$

$$V = \pi r^2 \cdot h$$
$$V = 3 \cdot 4^2 \cdot 10$$
$$= 3 \cdot 16 \cdot 10 = 480 \text{ cm}^3$$

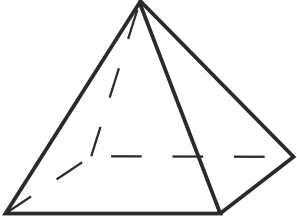
# DİK PİRAMİT



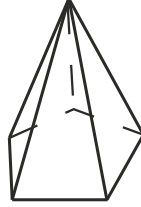
ÜÇGEN DİK PİRAMİT



KARE DİK PİRAMİT

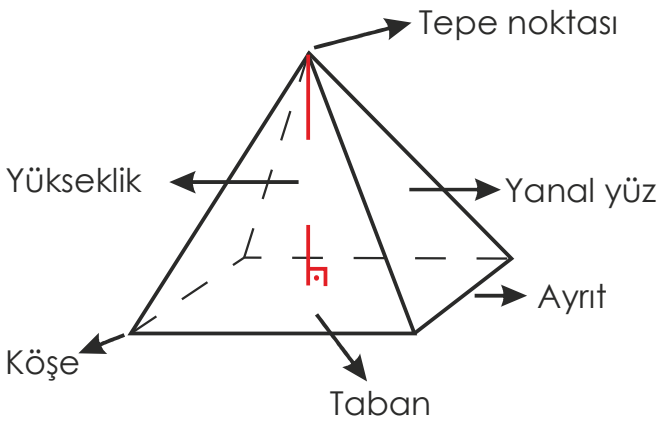


DİKDÖRTGEN DİK PİRAMİT



DÜZGÜN BEŞGEN DİK PİRAMİT

## DİK PİRAMİDİN TEMEL ELEMANLARI



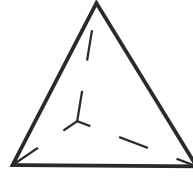
### ÜÇGEN DİK PİRAMİT:

- 1 TABANI
- 3 YANAL YÜZÜ (n)
- 4 YÜZÜ (n+1)
- 4 KÖŞESİ (n+1)
- 6 AYRITI (nx2) vardır.

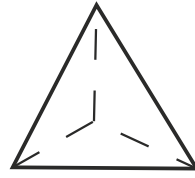
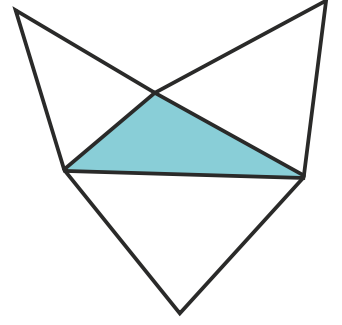
### KARE DİK PİRAMİDİN

- 1 TABANI
- 4 YANAL YÜZÜ (n)
- 5 YÜZÜ (n+1)
- 5 KÖŞESİ (n+1)
- 8 AYRITI (nx2) vardır.

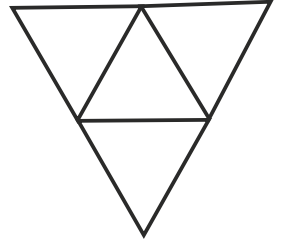
## DİK PİRAMİDİN AÇINIMI



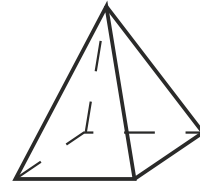
ÜÇGEN DİK PİRAMİT



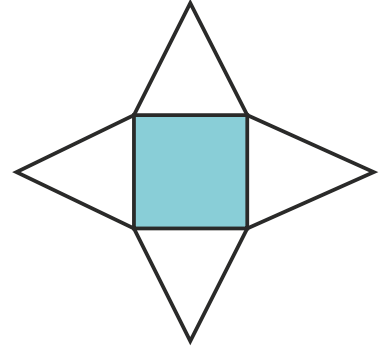
DÜZGÜN DÖRTYÜZLÜ



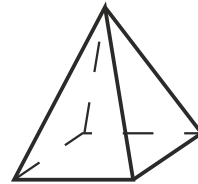
Bütün yüzleri eşkenar üçgen dolan piramide Düzgün dört yüzlü denir.



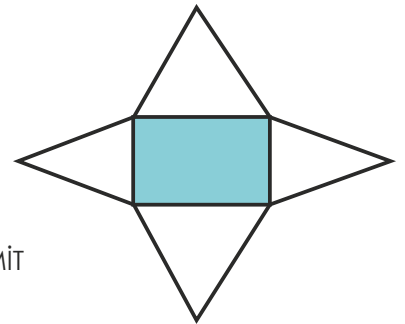
KARE DİK PİRAMİT



Eşkenar üçgen ve Kare dik piramidin yanıl yüzleri birbirine eş ikizkenar üçgenlerdir.



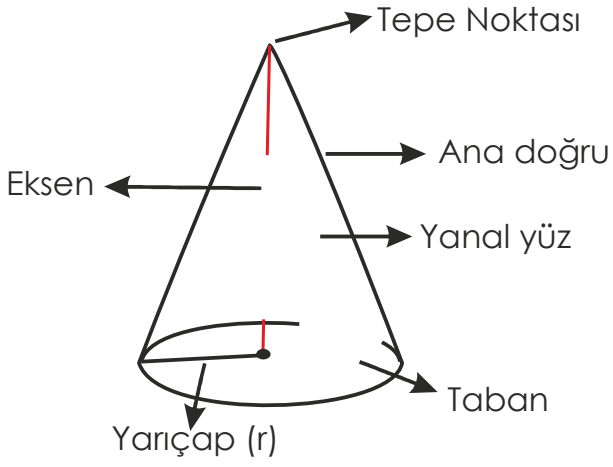
DİKDÖRTGEN DİK PİRAMİT



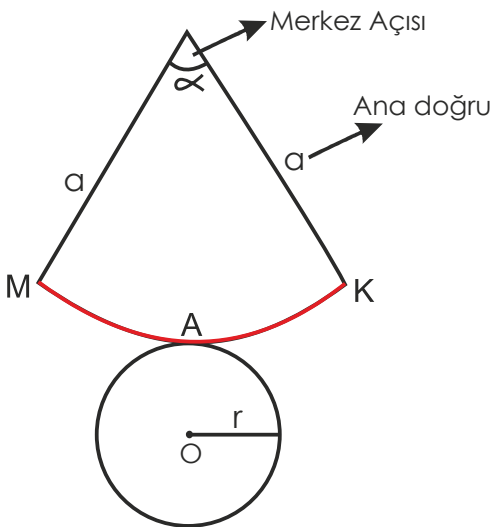
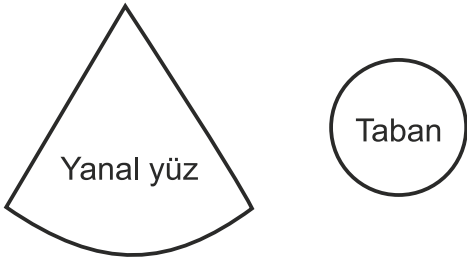
Dikdörtgen dik piramidin **KARŞILIKLI** yanıl yüzleri birbirine eş ikizkenar üçgenlerdir.

# DİK KONİ

## DİK KONİNİN ELEMANLARI



## DİK KONİNİN AÇINIMI



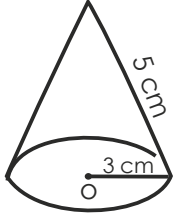
$$\widehat{MAK} = 2\pi r$$

$$\frac{r}{a} = \frac{\alpha}{360}$$

## ÖRNEK

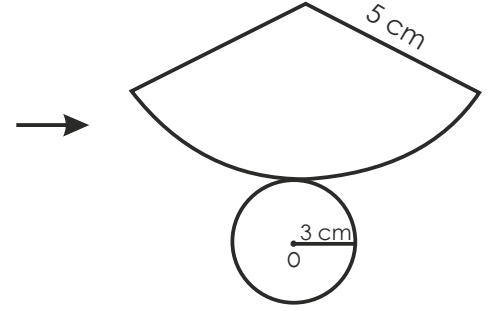
Yandaki şekilde O noktası, verilen dik koninin taban merkezidir. ( $\pi = 3$ )

Yandaki koninin açınımlarını çizelim.



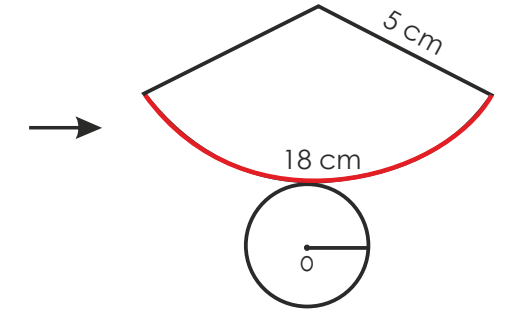
## AÇINIM 1

$$a = 5$$
$$r = 3$$



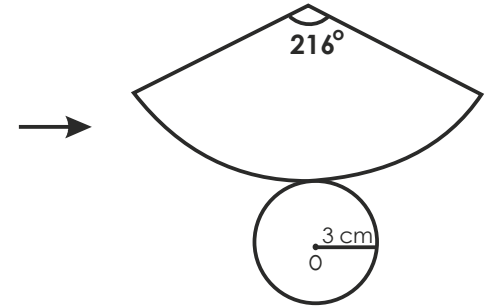
## AÇINIM 2

$$\widehat{MAK} = 2\pi r$$
$$= 2 \cdot 3 \cdot 3$$
$$= 18 \text{ cm}$$



## AÇINIM 3

$$\frac{r}{a} = \frac{\alpha}{360}$$
$$\frac{3}{5} = \frac{\alpha}{360}$$
$$\alpha = 216^\circ$$



## AÇINIM 4

