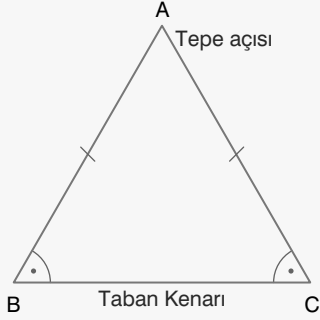




İkizkenar Üçgen

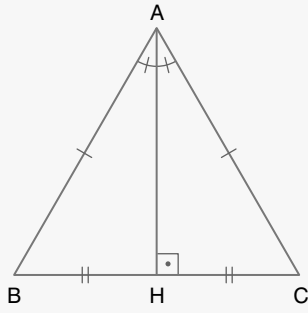


$$|AB| = |AC|$$

$$\widehat{B} = \widehat{C}$$



Dikkat



- İkizkenar üçgende tepeden indirilen dikme hem yükseklik, hem açıortay, hem de kenarortaydır.

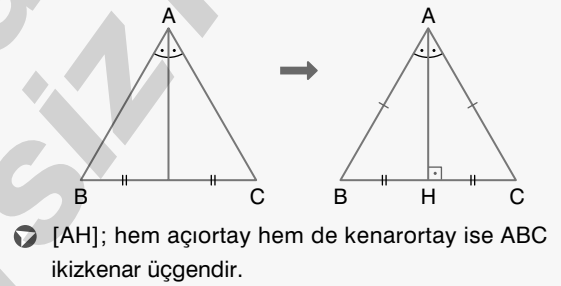
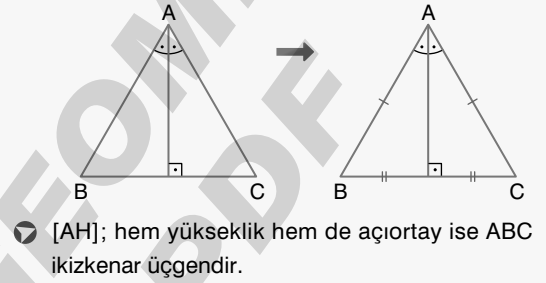
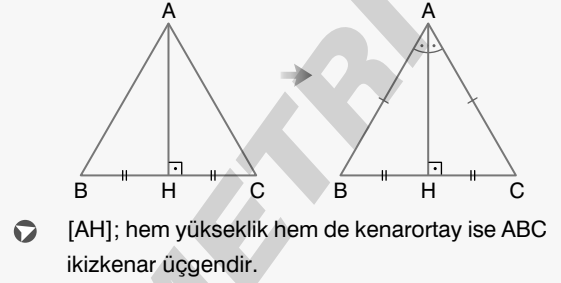
- [AH] simetri eksenidir.

Diklik

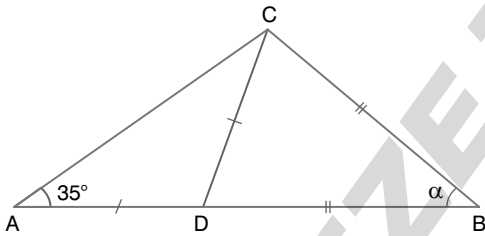
Açıortay

Kenarortay

İkizkenarlık



Örnek 1

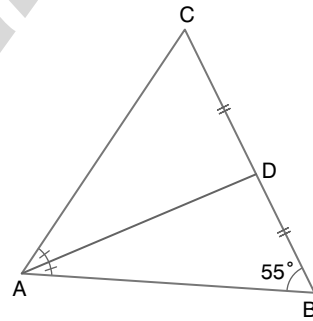


$$|AD| = |DC|$$

$$|DB| = |CB|$$

$$m(\widehat{ABC}) = \alpha = ?$$

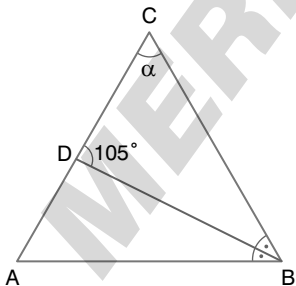
Örnek 3



$$|CD| = |DB|$$

$$m(\widehat{CAB}) \text{ kaç derecedir?}$$

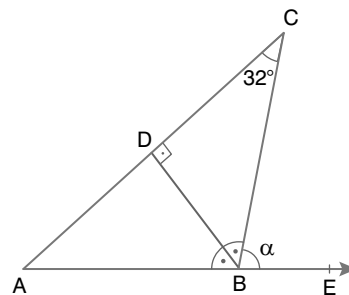
Örnek 2



$$|CA| = |CB|$$

$$m(\widehat{ACB}) = \alpha = ?$$

Örnek 4

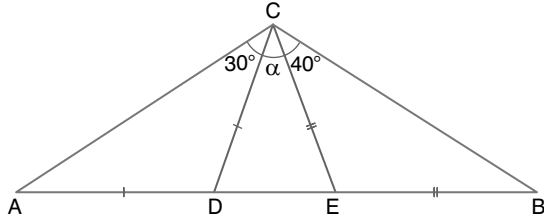


$$m(\widehat{CBE}) = \alpha = ?$$



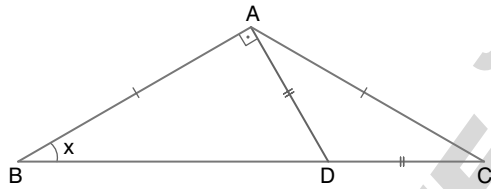
Üçgende Açılar

Örnek 5



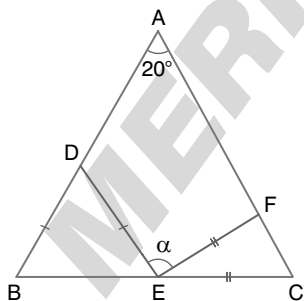
ABC bir üçgen, $|AD| = |DC|$, $|CE| = |EB|$,
 $m(\widehat{ACD}) = 30^\circ$, $m(\widehat{ECB}) = 40^\circ$ ve $m(\widehat{DCE}) = \alpha$ dir.
Yukarıdaki verilere göre, α kaç derecedir?

Örnek 6



ABC bir üçgen, $[BA] \perp [AD]$, $|AB| = |AC|$
 $|AD| = |DC|$, $m(\widehat{ABC}) = x$
Yukarıdaki verilere göre, x kaç derecedir?

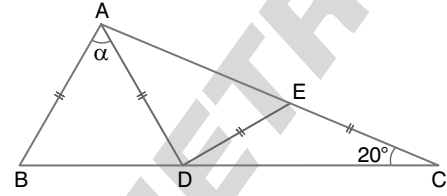
Örnek 7



ABC bir üçgen
 $|AB| = |AC|$
 $|DB| = |DE|$
 $|EF| = |EC|$
 $m(\widehat{BAC}) = 20^\circ$
 $m(\widehat{DEF}) = \alpha$

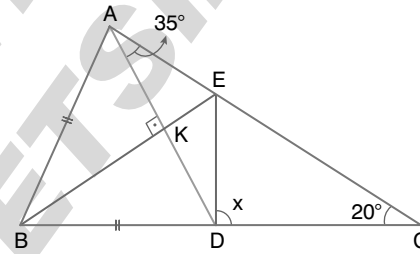
Yukarıdaki verilere göre, α kaç derecedir?

Örnek 8



ABC bir üçgen, $|AB| = |AD| = |DE| = |EC|$ ve $m(\widehat{ACB}) = 20^\circ$ dir.
Buna göre, $m(\widehat{BAD}) = \alpha$ kaç derecedir?

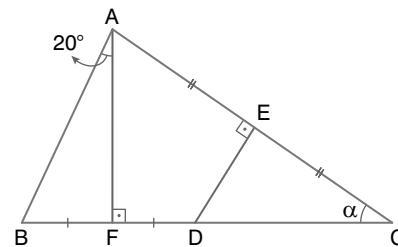
Örnek 9



ABC bir üçgen
 $[BE] \perp [AD]$
 $|AB| = |BD|$
 $m(\widehat{DAC}) = 35^\circ$
 $m(\widehat{ACB}) = 20^\circ$
 $m(\widehat{EDC}) = x$

Yukarıdaki verilere göre, x kaç derecedir?

Örnek 10

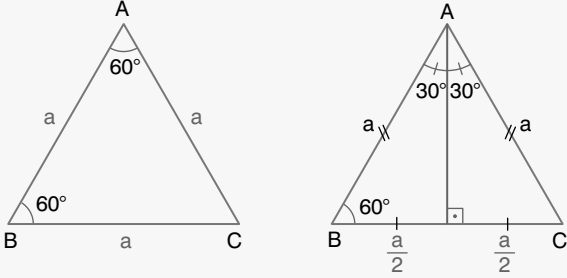


ABC bir üçgen
 $[AF] \perp [BC]$
 $[DE] \perp [AC]$
 $|BF| = |FD|$
 $|AE| = |EC|$

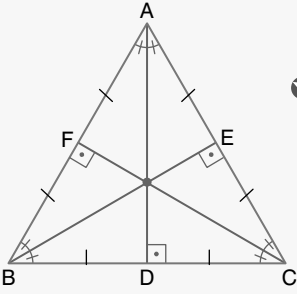
$m(\widehat{BAF}) = 20^\circ$ ise $m(\widehat{ACB}) = \alpha$ kaç derecedir?



Eşkenar Üçgen



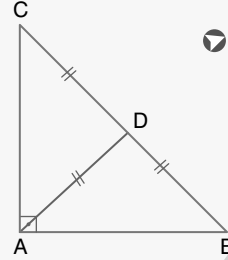
- Tüm kenar uzunlukları eşit olan üçgene eşkenar üçgen denir. Her eşkenar üçgen bir ikizkenar üçgendir.



- ABC eşkenar üçgen,

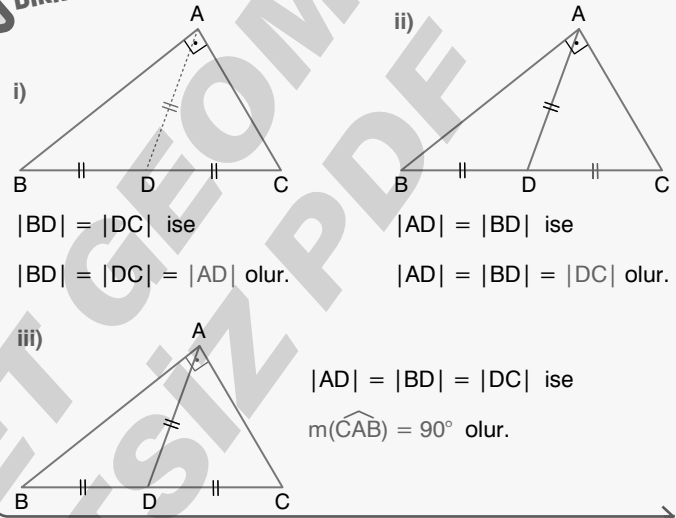
$$|AD| = |BE| = |CF|$$

Muhteşem Üçlü

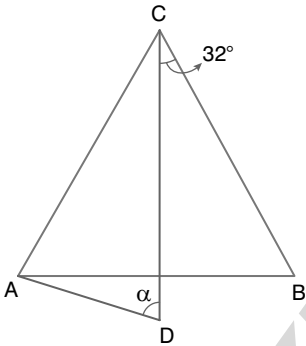


- Bir dik üçgende, dik açıdan hipotenüse kenarortay çizildiğinde oluşur.

$$|AD| = |CD| = |BD|$$



Örnek 11

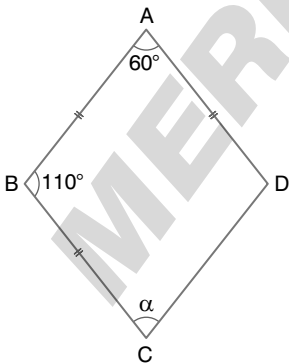


ABC eşkenar üçgen

$$|CA| = |CD|$$

$$m(\widehat{CDA}) = \alpha = ?$$

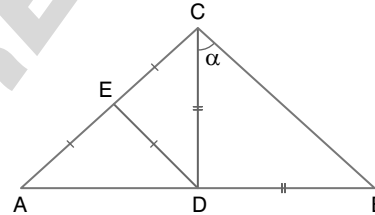
Örnek 12



$$|AB| = |AD| = |BC|$$

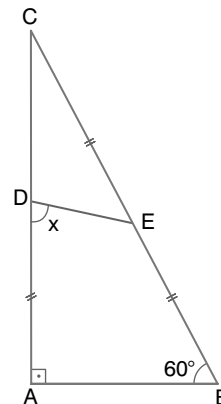
$$m(\widehat{BCD}) = \alpha = ?$$

Örnek 13



$$m(\widehat{DCB}) = \alpha = ?$$

Örnek 14



ABC bir dik üçgen

$$|AD| = |BE| = |EC|$$

$$m(\widehat{ABC}) = 60^\circ$$

$$m(\widehat{ADE}) = x$$

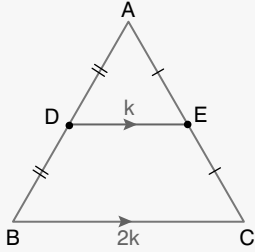
[CA] \perp [AB] olduğuna göre,

$$m(\widehat{ADE}) = x \text{ kaç derecedir?}$$



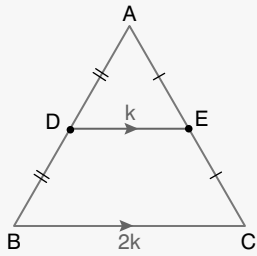
Üçgende Açılar

Orta Taban

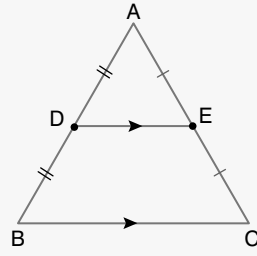


► D ve E buldukları kenarların orta noktaları ise [DE] orta tabandır.

$$[DE] \parallel [BC]$$

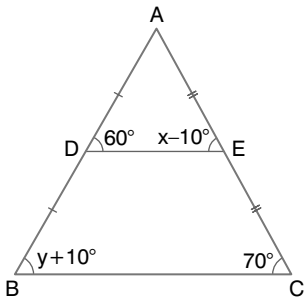


$$\begin{aligned} |AD| &= |DB| \\ |AE| &= |EC| \text{ ise} \\ 2|DE| &= |BC| \text{ olur.} \end{aligned}$$



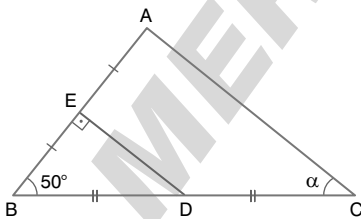
$$\begin{aligned} |AD| &= |DB| \\ [DE] &\parallel [BC] \text{ ise} \\ |AE| &= |EC| \text{ olur.} \end{aligned}$$

Örnek 15



$$\begin{aligned} |AD| &= |DB| \\ |AE| &= |EC| \\ x + y &= ? \end{aligned}$$

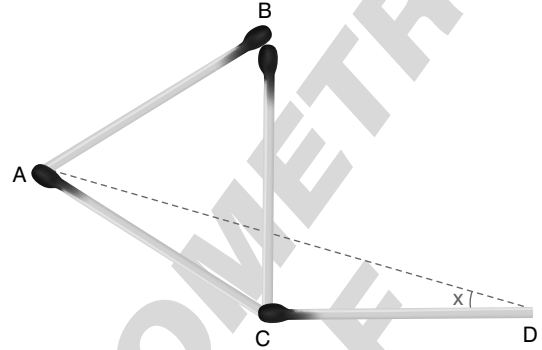
Örnek 16



$$\begin{aligned} \text{ABC bir üçgen} \\ [DE] &\perp [AB] \\ |BE| &= |EA| \\ |BD| &= |DC| \\ m(\widehat{ABC}) &= 50^\circ \end{aligned}$$

Yukarıdaki verilere göre, $m(\widehat{ACB}) = \alpha$ kaç derecedir?

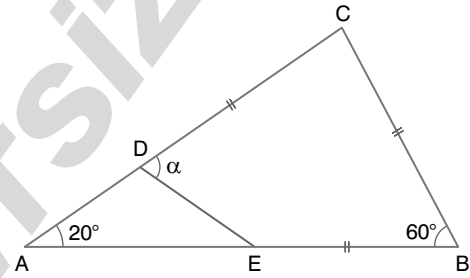
Örnek 17



Dört tane eş kibrit çöpü ile yukarıdaki şekil düzlemsel olarak oluşturulmuştur.

$[BC] \perp [CD]$ ise $m(\widehat{ADC}) = x$ kaç derecedir?

Örnek 18

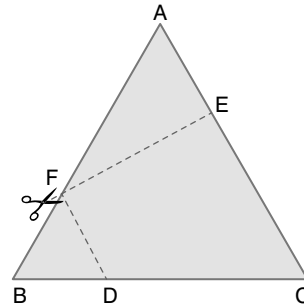


ABC bir üçgen, $|DC| = |CB| = |EB|$, $m(\widehat{ABC}) = 60^\circ$, $m(\widehat{CAB}) = 20^\circ$ ve $m(\widehat{CDE}) = \alpha$ dir.

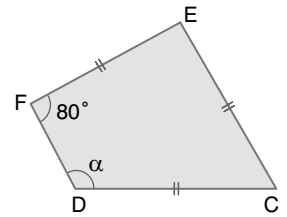
Yukarıdaki verilere göre, α kaç derecedir?

Örnek 19

Şekil - I'deki ABC eşkenar üçgeni biçimindeki kâğıt bir makasla [FE] ve [FD] boyunca kesilerek Şekil - II elde ediliyor.



Şekil - I



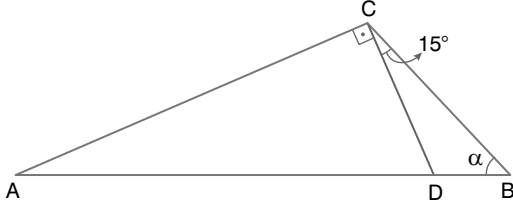
Şekil - II

$|FE| = |EC| = |DC|$, $m(\widehat{EFD}) = 80^\circ$ ve $m(\widehat{FDC}) = \alpha$ dir.

Yukarıdaki verilere göre, α kaç derecedir?



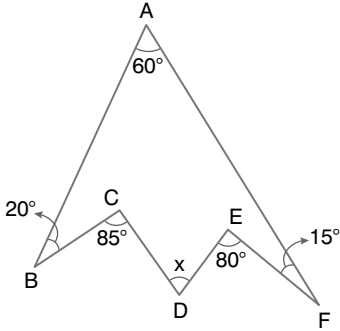
Örnek 20



ABC bir üçgen, $[AC] \perp [CD]$, $|AD| = 2|CB|$, $m(\widehat{DCB}) = 15^\circ$

Buna göre, $m(\widehat{ABC}) = \alpha$ kaç derecedir?

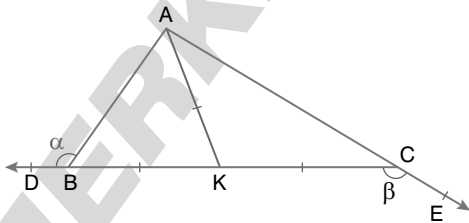
Örnek 21



$m(\widehat{BAF}) = 60^\circ$, $m(\widehat{ABC}) = 20^\circ$, $m(\widehat{BCD}) = 85^\circ$, $m(\widehat{DEF}) = 80^\circ$,
 $m(\widehat{EFA}) = 15^\circ$ ve $m(\widehat{CDE}) = x$ dir.

Buna göre, x kaç derecedir?

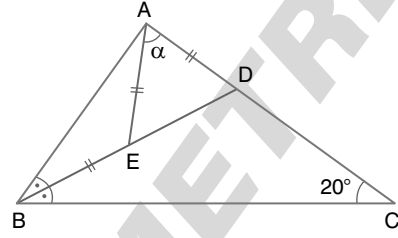
Örnek 22



ABC bir üçgen, $|AK| = |KC| = |BK|$, $m(\widehat{DBA}) = \alpha$, $m(\widehat{DCE}) = \beta$

A, C ve E noktaları doğrusal olduğuna göre, $\alpha + \beta$ toplamı kaç derecedir?

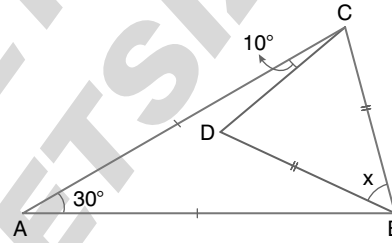
Örnek 23



ABC bir üçgen, $[BD]$ açıortay, $m(\widehat{ACB}) = 20^\circ$ ve
 $|BE| = |EA| = |AD|$ dir.

Buna göre, $m(\widehat{EAD}) = \alpha$ kaç derecedir?

Örnek 24



ABC bir üçgen

$|AC| = |AB|$

$|DB| = |CB|$

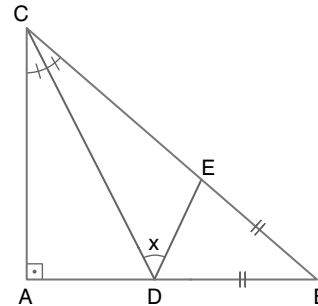
$m(\widehat{CAB}) = 30^\circ$

$m(\widehat{ACD}) = 10^\circ$

$m(\widehat{DBC}) = x$

Yukarıdaki verilere göre, x kaç derecedir?

Örnek 25



ABC dik üçgen

$[CD]$ açıortay

$[CA] \perp [AB]$

$|EB| = |DB|$

$m(\widehat{CDE}) = x$

Yukarıdaki verilere göre, x kaç derecedir?