

TEST - 4

açılar

1. Bir ABC üçgeninin iç açıları 3, 4 ve 8 ile orantılıdır.

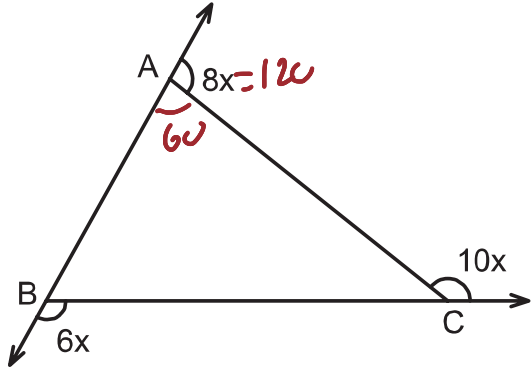
Buna göre, en büyük iç açı kaç derecedir?

- A) 80 B) 84 C) 90 D) 96 E) 100

$$15\alpha = 180 \quad 8\alpha = 96$$

$$\alpha = 12$$

2.



Şekildeki ABC üçgeninin dış açıları $10x$, $8x$, $6x$ tir.

$$24x = 360$$

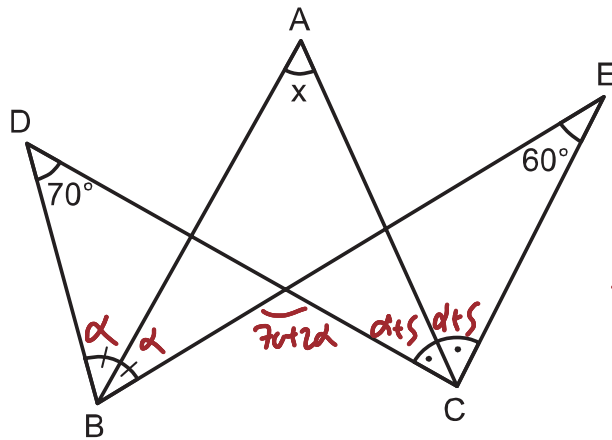
$$x = 15$$

$$8x = 120$$

Yukarıda verilene göre, $m(\widehat{BAC})$ kaç derecedir?

- A) 45 B) 60 C) 75 D) 90 E) 105

3.



[AB] ve [AC] açıortaylar

$m(\widehat{BDC}) = 70^\circ$

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

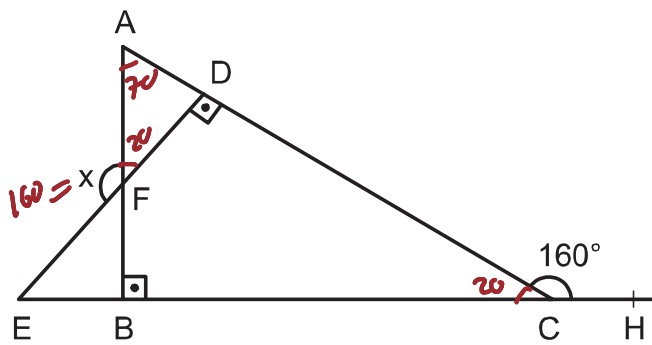
$$x + 2\alpha + 5 = 70 + 2\alpha$$

$$x = 65$$

Yukarıda verilene göre, $m(\widehat{BAC}) = x$ kaç derecedir?

- A) 50 B) 55 C) 60 D) 65 E) 70

4.



$AB \perp EH$,

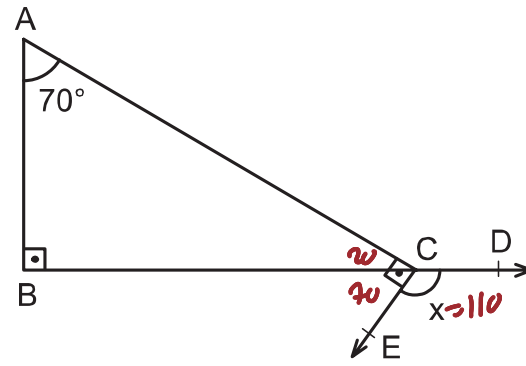
$ED \perp AC$,

$m(\widehat{ACH}) = 160^\circ$

Yukarıda verilene göre, $m(\widehat{AFE}) = x$ kaç derecedir?

- A) 160 B) 150 C) 140 D) 130 E) 120

5.



$AB \perp BD$

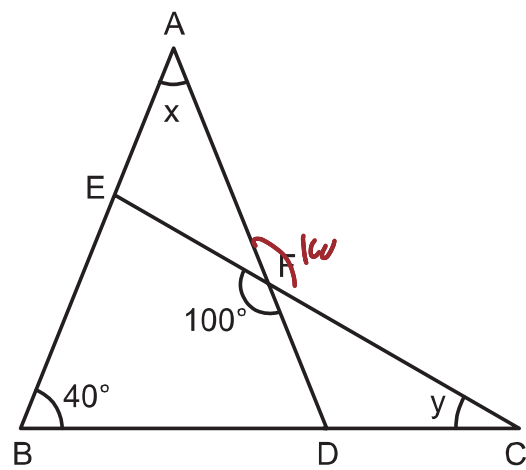
$AC \perp CE$

$m(\widehat{BAC}) = 70^\circ$

Yukarıda verilene göre, $m(\widehat{ECD}) = x$ kaç derecedir?

- A) 100 B) 105 C) 110 D) 115 E) 120

6.



ABD ve EBC üçgen

$m(\widehat{EFD}) = 100^\circ$

$m(\widehat{ABC}) = 40^\circ$

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

$m(\widehat{ECB}) = y$

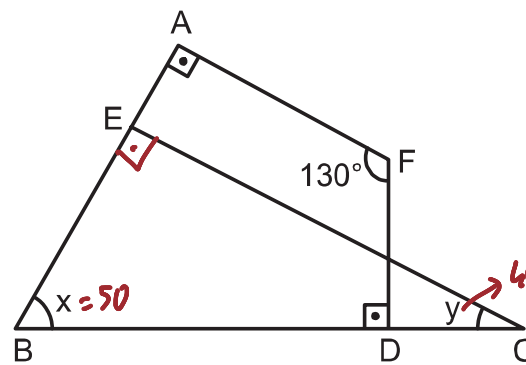
$$40 + x + y = 100$$

$$x + y = 60$$

Yukarıda verilene göre, $x + y$ kaç derecedir?

- A) 60 B) 65 C) 70 D) 75 E) 80

7.



$AB \perp AF$

$FD \perp BC$

$AF \parallel EC$

$m(\widehat{AFD}) = 130^\circ$

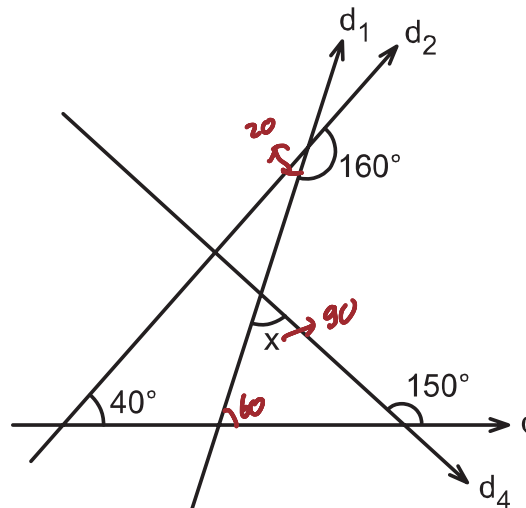
$m(\widehat{ABC}) = x$

$m(\widehat{ECB}) = y$

Yukarıda verilene göre, $x - y$ kaç derecedir?

- A) 10 B) 15 C) 20 D) 25 E) 30

8.

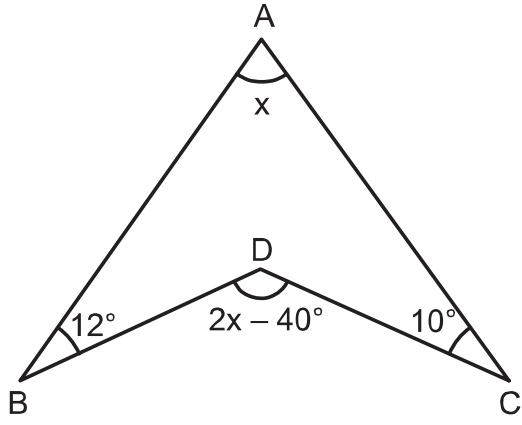


Şekilde d_1, d_2, d_3, d_4 doğrularının oluşturduğu açılar gösterilmiştir.

Buna göre, x kaç derecedir?

- A) 70 B) 75 C) 80 D) 85 E) 90

9.

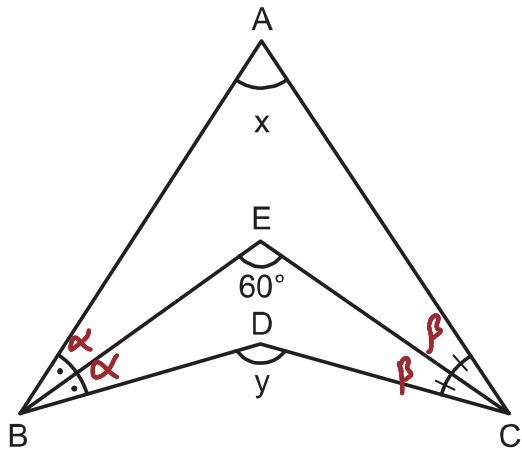


$$\begin{aligned} m(\widehat{BAC}) &= x \\ m(\widehat{BDC}) &= 2x - 40^\circ \\ m(\widehat{ABD}) &= 12^\circ \\ m(\widehat{ACD}) &= 10^\circ \\ x + 22 &= 2x - 40 \end{aligned}$$

Yukarıda verilenlere göre, x kaç derecedir?

- A) 48 B) 54 C) 57 D) 60 E) 62

10.

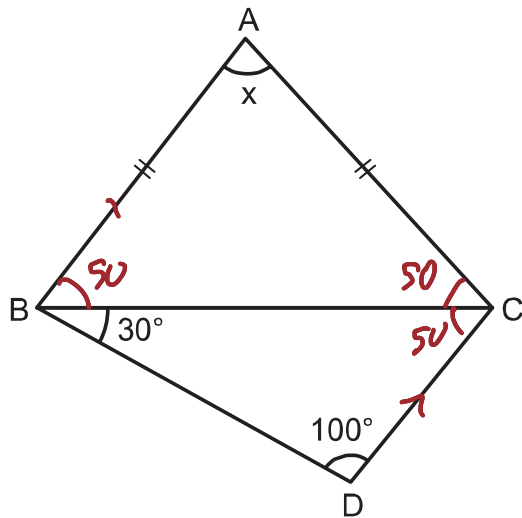


$$\begin{aligned} m(\widehat{ABE}) &= m(\widehat{EBD}) \\ m(\widehat{ACE}) &= m(\widehat{ECD}) \\ m(\widehat{BEC}) &= 60^\circ \\ m(\widehat{BAC}) &= x \\ m(\widehat{BDC}) &= y \\ -/ x + \alpha + \beta &= 60 \\ x + 2\alpha + 2\beta &= y \end{aligned}$$

Yukarıda verilenlere göre, x + y kaç derecedir?

- A) 120 B) 110 C) 100 D) 90 E) 80

11.

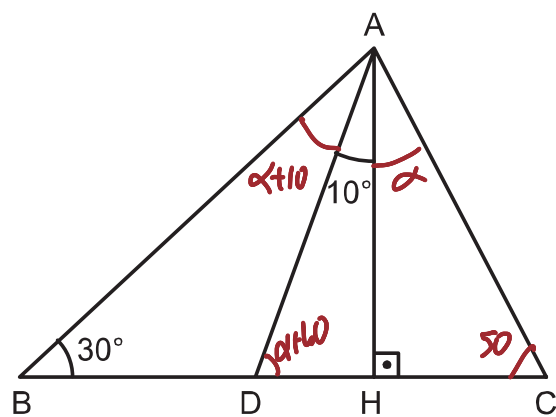


$$\begin{aligned} CD &\parallel AB \\ m(\widehat{BDC}) &= 100^\circ \\ m(\widehat{DBC}) &= 30^\circ \\ |AB| &= |AC| \end{aligned}$$

Yukarıda verilenlere göre, m(\widehat{BAC}) = x kaç derecedir?

- A) 80 B) 90 C) 100 D) 110 E) 120

12.

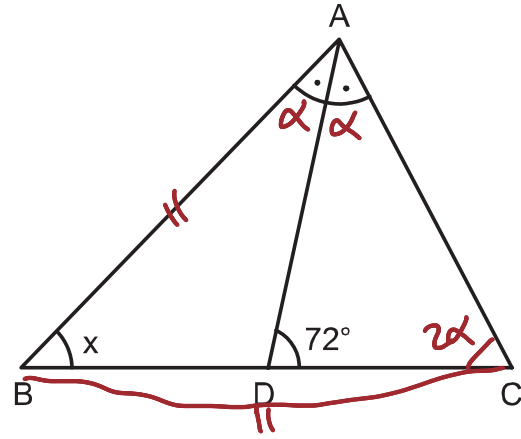


$$\begin{aligned} \text{ABC üçgeninde} \\ m(\widehat{BAD}) &= m(\widehat{DAC}) \\ AH &\perp BC \\ m(\widehat{DAH}) &= 10^\circ \\ m(\widehat{ABC}) &= 30^\circ \\ \alpha + 50 &= 90 \\ \alpha &= 40 \end{aligned}$$

Yukarıda verilenlere göre, m(\widehat{ACB}) kaç derecedir?

- A) 40 B) 45 C) 50 D) 55 E) 60

13.



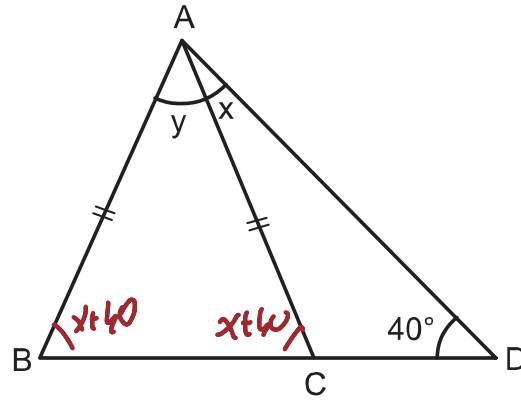
ABC üçgeninde
AD açıortay
 $m(\widehat{ADC}) = 72^\circ$
 $|AB| = |BC|$

$$\begin{aligned} 3\alpha + 72 &= 180 \\ \alpha &= 36 \\ 72 + 72 + x &= 180 \Rightarrow x = 36 \end{aligned}$$

Yukarıda verilenlere göre, m(\widehat{ABC}) = x kaç derecedir?

- A) 24 B) 32 C) 36 D) 44 E) 48

14.



ABD üçgeninde
 $m(\widehat{ADB}) = 40^\circ$
 $m(\widehat{CAD}) = x$
 $m(\widehat{BAC}) = y$
 $|AB| = |AC|$

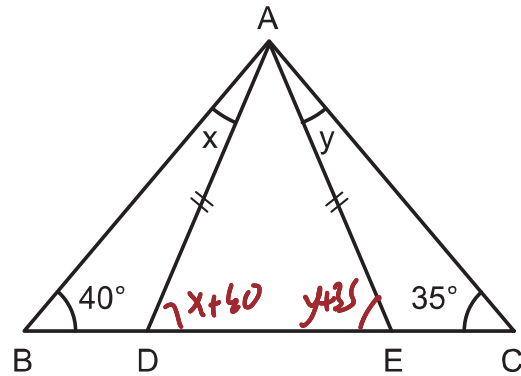
$$\begin{aligned} 2x + 80 + y &= 180 \\ y &= 100 - 2x \end{aligned}$$

Yukarıda verilenlere göre, y nin x türünden değeri aşağıdakilerden hangisidir?

- A) $80^\circ - x$ B) $x + 40^\circ$ C) $100^\circ - x$
D) $100^\circ - 2x$ E) $140^\circ - x$

karekök

15.



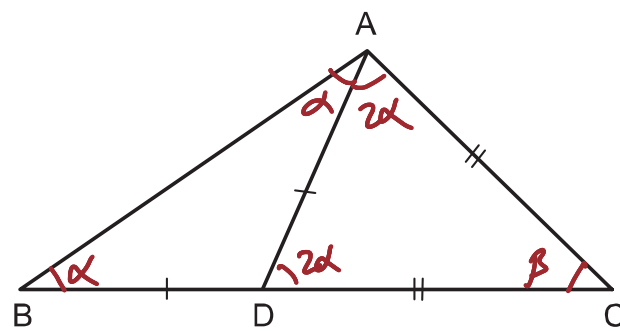
ABC üçgeninde
 $m(\widehat{ABC}) = 40^\circ$
 $m(\widehat{ACB}) = 35^\circ$
 $m(\widehat{BAD}) = x$
 $m(\widehat{EAC}) = y$
 $|AD| = |AE|$

$$\begin{aligned} y + 35 &= x + 40 \\ y - x &= 5 \end{aligned}$$

Yukarıda verilenlere göre, y - x kaç derecedir?

- A) 5 B) 10 C) 15 D) 20 E) 25

16.



ABC üçgeninde
 $|AC| = |CD|$
 $|AD| = |BD|$

$$\begin{aligned} 6\alpha &< 180 \\ \alpha &< 45 \\ 3\alpha &< 135 \Rightarrow 134 \end{aligned}$$

Yukarıda verilenlere göre, m(\widehat{BAC}) tamsayı olarak en çok kaç derecedir?

- A) 89 B) 110 C) 120 D) 134 E) 141