

Üçgende Açı

Test 1

1. Şekilde,

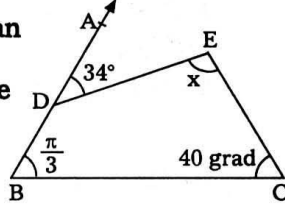
$$m(\widehat{CBA}) = \frac{\pi}{3} \text{ radyan}$$

$$m(\widehat{ECB}) = 40 \text{ grad ve}$$

$$m(\widehat{EDA}) = 34^\circ \text{ ise,}$$

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

kaç derecedir?



- A) 118 B) 120 C) 122 D) 124 E) 126

2. Şekilde,

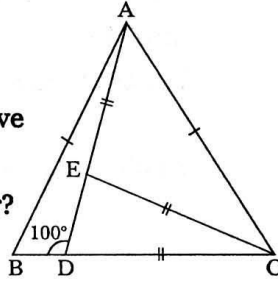
ABC üçgen

$$|AB| = |AC|$$

$$|AE| = |EC| = |DC| \text{ ve}$$

$$m(\widehat{ADB}) = 100^\circ \text{ ise,}$$

$m(\widehat{BAD})$ kaç derecedir?

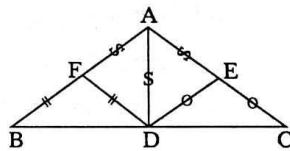


- A) 5 B) 10 C) 15 D) 20 E) 25

3. Şekilde,

$$|BF| = |FD|$$

$$|DE| = |EC| \text{ ve}$$



$$|AF| = |AD| = |AE| \text{ ise,}$$

$m(\widehat{BAC})$ kaç derecedir?

- A) 100 B) 110 C) 120 D) 130 E) 140

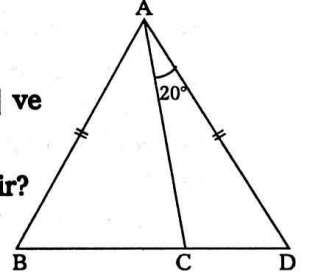
4. Şekilde,

$$|AB| = |AD|$$

$$|BC| + |CD| = |AB| \text{ ve}$$

$$m(\widehat{CAD}) = 20^\circ \text{ ise,}$$

$m(\widehat{BAC})$ kaç derecedir?



- A) 40 B) 42 C) 45 D) 48 E) 52

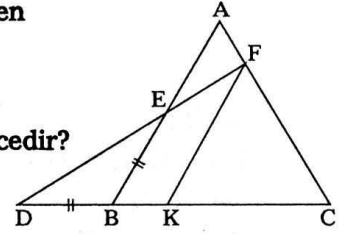
5. Şekilde,

ABC eşkenar üçgen

$$|DB| = |BE| \text{ ve}$$

$$|DK| = |KC| \text{ ise,}$$

$m(\widehat{FKC})$ kaç derecedir?



- A) 20 B) 30 C) 35 D) 45 E) 60

6. Şekilde,

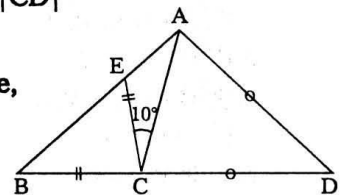
$$|AB| = |AD| = |CD|$$

$$|BC| = |CE| \text{ ve}$$

$$m(\widehat{ECA}) = 10^\circ \text{ ise,}$$

$m(\widehat{ADB})$

kaç derecedir?



- A) 40 B) 45 C) 48 D) 50 E) 52

7. Şekilde,

$|AC| = |BC|$

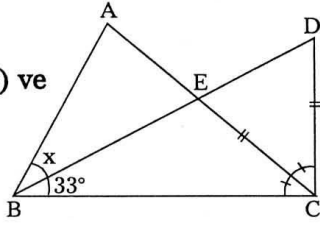
$|EC| = |DC|$

$m(\widehat{DCA}) = m(\widehat{ACB})$ ve

$m(\widehat{DBC}) = 33^\circ$ ise,

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

kaç derecedir?

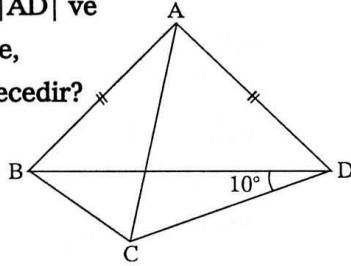


- A) 33 B) 36 C) 38 D) 40 E) 43

8. Şekilde,

$|AB| = |AC| = |AD|$ ve

$m(\widehat{BDC}) = 10^\circ$ ise,

 $m(\widehat{BAC})$ kaç derecedir?

- A) 15 B) 20 C) 25 D) 30 E) 35

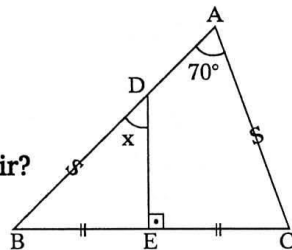
9. Şekilde,

$[DE] \perp [BC]$

$|BE| = |EC|$

$|DB| = |AC|$ ve

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

 $m(\widehat{BDE})$ kaç derecedir?

- A) 30 B) 35 C) 40 D) 50 E) 55

10. Şekilde,

$[AB] \perp [AC]$

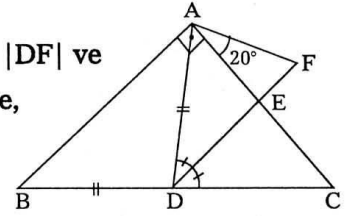
$[DF]$ açıortay

$|AD| = |BD| = |DF|$ ve

$m(\widehat{FAC}) = 20^\circ$ ise,

$m(\widehat{ABC})$

kaç derecedir?



- A) 40 B) 50 C) 60 D) 70 E) 80

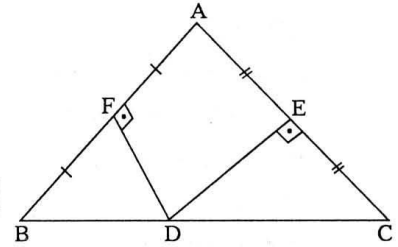
11. Şekilde,

$[DE] \perp [AC]$

$[DF] \perp [AB]$

$|AF| = |FB|$

$|AE| = |EC|$



Yukarıdaki verilere göre,

 $m(\widehat{BAC})$ kaç derecedir?

- A) 30 B) 45 C) 60 D) 75 E) 90

12. Şekilde,

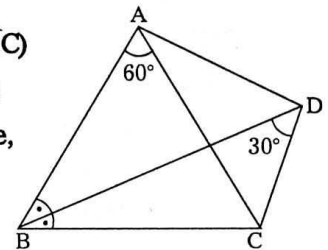
$m(\widehat{ABD}) = m(\widehat{DBC})$

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

$m(\widehat{BDC}) = 30^\circ$ ise,

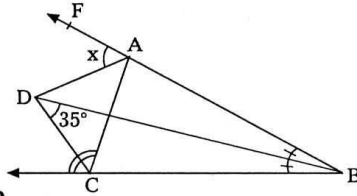
$m(\widehat{BAD})$

kaç derecedir?



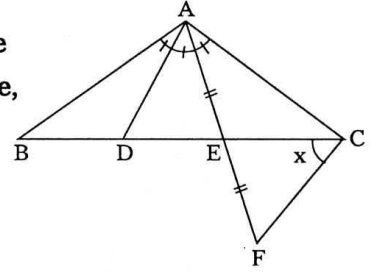
- A) 70 B) 80 C) 90 D) 120 E) 150

13. Şekilde,
ABC üçgen
[BD] ile [CD]
açıortay ve
 $m(\widehat{CDB}) = 35^\circ$ ise,
 $m(\widehat{DAF}) = x$ kaç derecedir?



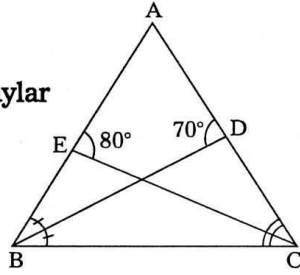
- A) 35 B) 40 C) 50 D) 55 E) 60

16. Şekilde,
 $m(\widehat{BAD}) = m(\widehat{DAF}) = m(\widehat{FAC})$
 $|AC| = |DC|$
 $|AB| = |BE|$ ve
 $|AE| = |EF|$ ise,
 $m(\widehat{BCF}) = x$
kaç derecedir?



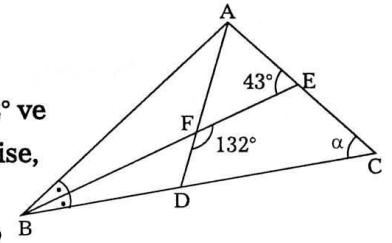
- A) 18 B) 36 C) 54 D) 58 E) 72

14. Şekilde,
ABC üçgen
[BD] ile [CE] açıortaylar
 $m(\widehat{AEC}) = 80^\circ$ ve
 $m(\widehat{ADB}) = 70^\circ$ ise,
 $m(\widehat{BAC})$
kaç derecedir?



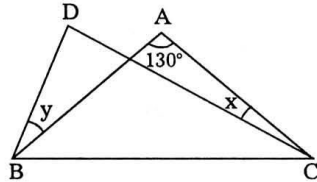
- A) 40 B) 50 C) 60 D) 70 E) 80

17. Şekilde,
[BE] açıortay
 $m(\widehat{BEA}) = 43^\circ$
 $m(\widehat{DFE}) = 132^\circ$ ve
 $|AD| = |BD|$ ise,
 $m(\widehat{ACB}) = \alpha$
kaç derecedir?



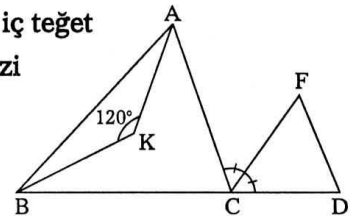
- A) 25 B) 27 C) 30 D) 32 E) 35

15. Şekilde,
 $|AB| = |AC|$
 $|DC| = |BC|$
 $m(\widehat{ACD}) = x$
 $m(\widehat{DBA}) = y$ ve
 $m(\widehat{BAC}) = 130^\circ$ ise,
 x in y cinsinden değeri kaçtır?



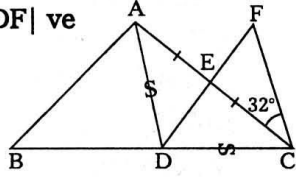
- A) $y+45^\circ$ B) $2y-50^\circ$ C) $2y-105^\circ$
D) $3y+30^\circ$ E) $3y-30^\circ$

18. Şekilde,
B, C, D noktaları doğrusal
K, ABC üçgeninin iç teğet
çemberinin merkezi
[CF], ACD nin
açıortayı
 $|CF| = |FD|$ ve
 $m(\widehat{BKA}) = 120^\circ$ ise,
 $m(\widehat{CFD})$ kaç derecedir?



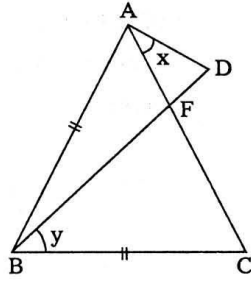
- A) 40 B) 50 C) 60 D) 70 E) 80

19. Şekilde,
 $m(\widehat{ACF}) = 32^\circ$
 $|AB| = |AC|$
 $|DC| = |AD| = |DF|$ ve
 $|AE| = |EC|$ ise,
 $m(\widehat{BAD})$
 kaç derecedir?



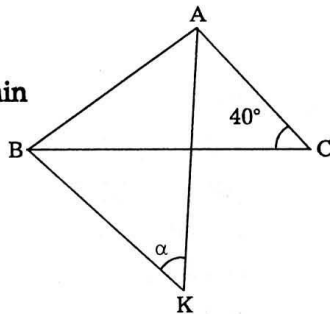
- A) 100 B) 102 C) 104 D) 106 E) 108

20. Şekilde,
 $|BA| = |BD| = |BC|$
 $m(\widehat{CAD}) = x$ ve
 $m(\widehat{CBD}) = y$ ise,
 y nin x türünden eşiti
 aşağıdakilerden
 hangisidir?



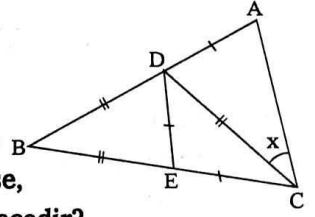
- A) $x+30^\circ$ B) $x-30^\circ$ C) x
 D) $\frac{x}{2}$ E) $2x$

21. Şekilde,
 K, ABC üçgeninin
 dış teğet çemberinin
 merkezi ve
 $m(\widehat{ACB}) = 40^\circ$ ise,
 $m(\widehat{AKB}) = \alpha$
 kaç derecedir?



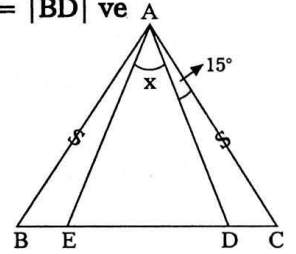
- A) 20 B) 30 C) 40 D) 50 E) 60

22. Şekilde,
 B, D, A ve B, E, C
 noktaları doğrusal
 $|BD| = |BE| = |DC|$ ve
 $|AD| = |DE| = |EC|$ ise,
 $m(\widehat{ACD}) = x$ kaç derecedir?



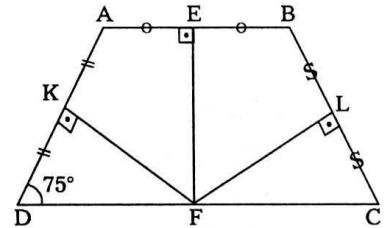
- A) 15 B) 18 C) 30 D) 36 E) 45

23. Şekilde,
 ABC üçgen
 $|AB| = |AC| = |EC| = |BD|$ ve
 $m(\widehat{DAC}) = 15^\circ$ ise,
 $m(\widehat{EAD}) = x$
 kaç derecedir?



- A) 15 B) 30 C) 45 D) 50 E) 60

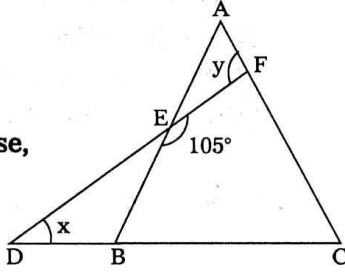
24. Şekilde,
 $[KF] \perp [AD]$
 $[FE] \perp [AB]$
 $[FL] \perp [BC]$
 $|AK| = |KD|$
 $|AE| = |EB|$
 $|BL| = |LC|$ ve
 $m(\widehat{ADC}) = 75^\circ$ ise,
 $m(\widehat{ABC})$ kaç derecedir?



- A) 100 B) 105 C) 115 D) 120 E) 125

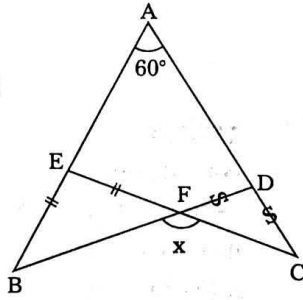
Test 2

1. Şekilde,
 $|AB| = |AC|$
 $|DF| = |DC|$ ve
 $m(\widehat{BEF}) = 105^\circ$ ise,
 $x+y$ toplamı
 kaç derecedir?



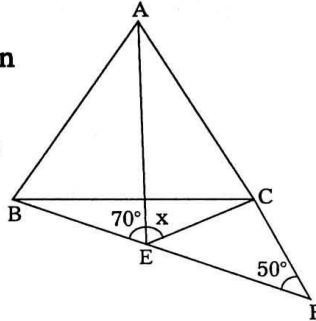
- A) 80 B) 85 C) 90 D) 100 E) 105

2. Şekilde,
 B, F, D ve E, F, C
 noktaları doğrusal
 $m(\widehat{BAC}) = 60^\circ$
 $|BE| = |EF|$ ve
 $|FD| = |DC|$ ise,
 $m(\widehat{BFC}) = x$
 kaç derecedir?



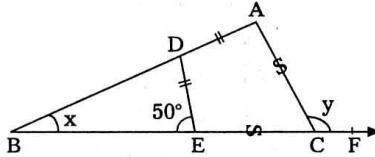
- A) 130 B) 140 C) 150 D) 160 E) 170

3. Şekilde,
 ABC eşkenar üçgen
 $m(\widehat{BEA}) = 70^\circ$ ve
 $m(\widehat{AFB}) = 50^\circ$ ise,
 $m(\widehat{AEC}) = x$
 kaç derecedir?



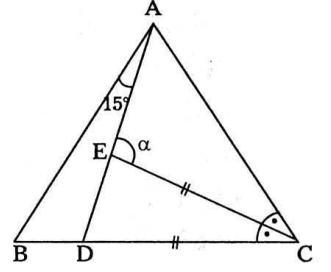
- A) 85 B) 80 C) 70 D) 60 E) 45

4. Şekilde,
 $|AD| = |DE|$
 $|AC| = |EC|$
 $m(\widehat{BED}) = 50^\circ$
 $m(\widehat{ABF}) = x$ ve
 $m(\widehat{ACF}) = y$ ise,
 y nin x cinsinden eşiti aşağıdakilerden han-
 gisidir?



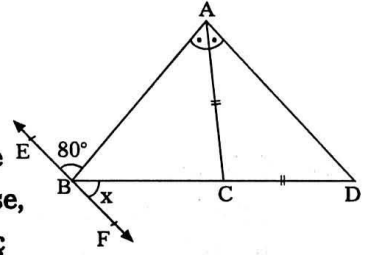
- A) $130^\circ + x$ B) $120^\circ + x$ C) $110^\circ + x$
 D) $90^\circ + x$ E) $2x$

5. Şekilde,
 $|AB| = |AC|$
 $|DC| = |EC|$
 $[CE]$ açıortay ve
 $m(\widehat{BAD}) = 15^\circ$ ise,
 $m(\widehat{AEC}) = \alpha$
 kaç derecedir?



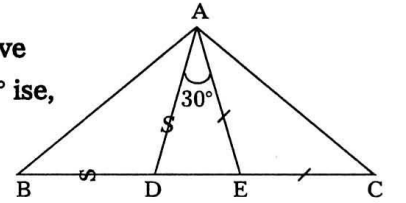
- A) 125 B) 120 C) 115 D) 110 E) 105

6. Şekilde,
 $[AD] \parallel EF$
 $[AC]$ açıortay
 $|AC| = |CD|$ ve
 $m(\widehat{EBA}) = 80^\circ$ ise,
 $m(\widehat{DBF}) = x$ kaç
 derecedir?



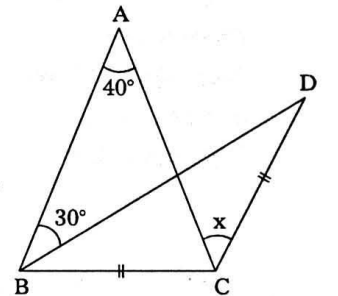
- A) 15 B) 30 C) 40 D) 50 E) 60

7. Şekilde,
 $|BD| = |AD|$
 $|AE| = |EC|$ ve
 $m(\widehat{DAE}) = 30^\circ$ ise,
 $m(\widehat{BAC})$ kaç
 derecedir?



- A) 105 B) 100 C) 95 D) 90 E) 85

8. Şekilde,
 $|AB| = |AC|$
 $|BC| = |CD|$
 $m(\widehat{BAC}) = 40^\circ$ ve
 $m(\widehat{ABD}) = 30^\circ$ ise,
 $m(\widehat{ACD}) = x$
 kaç derecedir?



- A) 15 B) 20 C) 25 D) 30 E) 40

9. Şekilde,

$[AB] \perp DK$

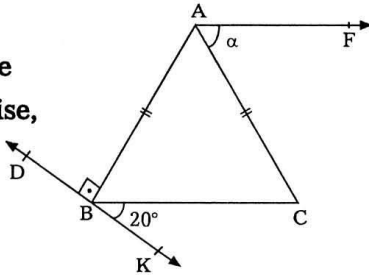
$[AF] \parallel [BC]$

$|AB| = |AC|$ ve

$m(\widehat{CBK}) = 20^\circ$ ise,

$m(\widehat{FAC}) = \alpha$

kaç derecedir?



- A) 30 B) 45 C) 50 D) 60 E) 70

13. Şekilde,

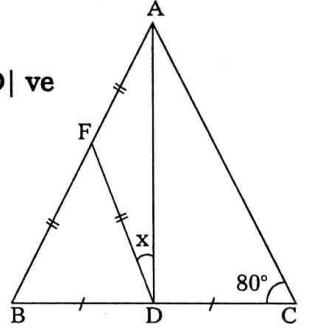
$|BD| = |DC|$

$|AF| = |FB| = |FD|$ ve

$m(\widehat{ACB}) = 80^\circ$ ise,

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

kaç derecedir?



- A) 40 B) 30 C) 20 D) 10 E) 5

10. Şekilde,

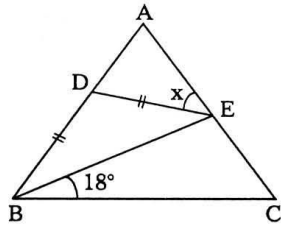
$|AB| = |AC|$

$|DE| = |DB|$ ve

$m(\widehat{EBC}) = 18^\circ$ ise,

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

kaç derecedir?



- A) 18 B) 24 C) 30 D) 36 E) 45

14. Şekilde,

A, D, C noktaları doğrusal

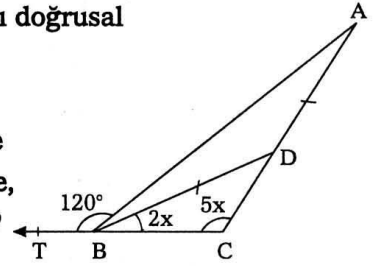
$m(\widehat{ABT}) = 120^\circ$

$|AD| = |BD|$

$m(\widehat{DBC}) = 2x$ ve

$m(\widehat{ACT}) = 5x$ ise,

x kaç derecedir?



- A) 10 B) 20 C) 30 D) 35 E) 40

11. Şekilde,

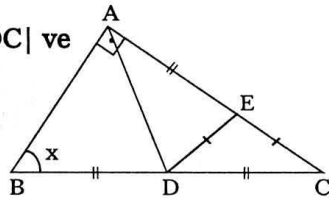
$[AB] \perp [AC]$

$|AE| = |BD| = |DC|$ ve

$|DE| = |EC|$ ise,

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

kaç derecedir?



- A) 36 B) 48 C) 54 E) 60 E) 72

15. Şekilde,

$|AB| = |BD|$

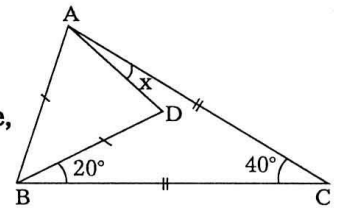
$|AC| = |BC|$

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

$m(\widehat{DBC}) = 20^\circ$ ise,

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

kaç derecedir?



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

12. Şekilde,

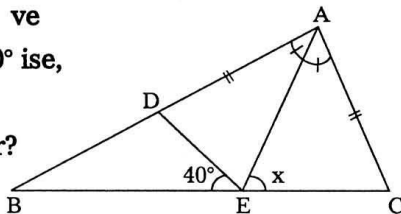
$[AE]$, BAC açısının açıortayı

$|AD| = |AC|$ ve

$m(\widehat{DEB}) = 40^\circ$ ise,

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

kaç derecedir?



- A) 50 B) 60 C) 70 D) 75 E) 80

16. Şekilde,

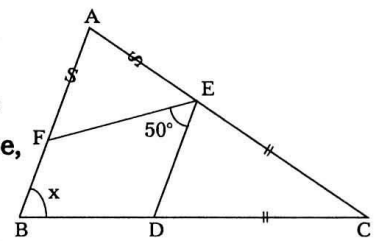
$|AF| = |AE|$

$|CE| = |CD|$ ve

$m(\widehat{FED}) = 50^\circ$ ise,

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

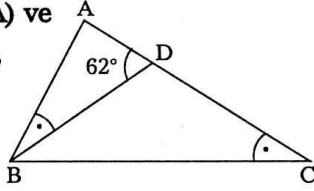
kaç derecedir?



- A) 50 B) 60 C) 70 D) 75 E) 80

17. Şekilde,

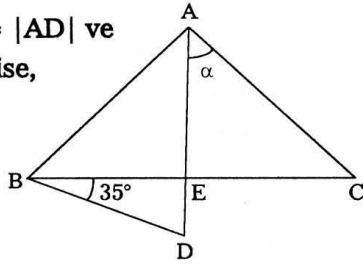
$m(\widehat{ABD}) = m(\widehat{BCA})$ ve
 $m(\widehat{BDA}) = 62^\circ$ ise,
 $m(\widehat{ABC})$ kaç
derecedir?



- A) 60 B) 62 C) 70 D) 73 E) 80

18. Şekilde,

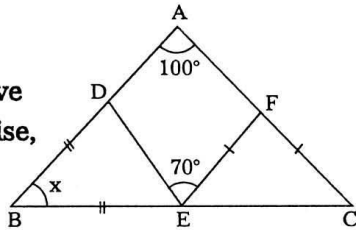
$|AB| = |AC| = |AD|$ ve
 $m(\widehat{CBD}) = 35^\circ$ ise,
 $m(\widehat{DAC}) = \alpha$
kaç derecedir?



- A) 35 B) 40 C) 60 D) 70 E) 80

19. Şekilde,

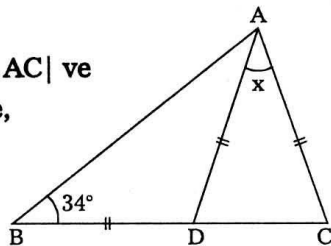
$|BD| = |BE|$
 $|FE| = |FC|$
 $m(\widehat{BAC}) = 100^\circ$ ve
 $m(\widehat{DEF}) = 70^\circ$ ise,
 $m(\widehat{ABC}) = x$
kaç derecedir?



- A) 20 B) 40 C) 50 D) 60 E) 70

20. Şekilde,

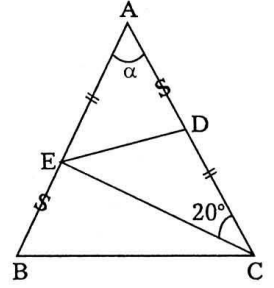
$|BD| = |AD| = |AC|$ ve
 $m(\widehat{ABC}) = 34^\circ$ ise,
 $m(\widehat{DAC}) = x$
kaç derecedir?



- A) 44 B) 46 C) 48 D) 50 E) 52

21. Şekilde,

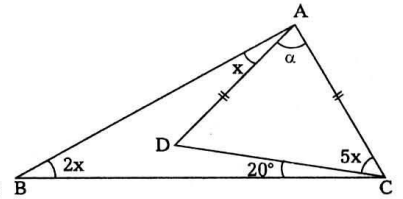
$|AE| = |DC|$
 $|AD| = |EB|$
 $m(\widehat{BAC}) = \alpha$ ve
 $m(\widehat{ACE}) = 20^\circ$ ise,
ECB açısının α
cinsinden eşiti
aşağıdakilerden
hangisidir?



- A) $\frac{\alpha}{2}$ B) α C) $70^\circ - \frac{\alpha}{2}$
D) $90^\circ - \frac{\alpha}{2}$ E) $70^\circ + \frac{\alpha}{2}$

22. Şekilde,

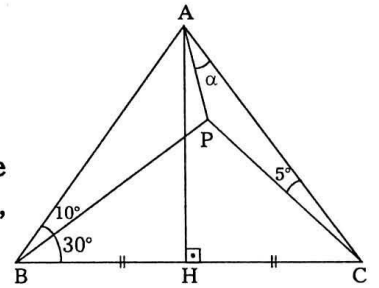
$|AD| = |AC|$
 $m(\widehat{ABC}) = 2x$
 $m(\widehat{ACD}) = 5x$
 $m(\widehat{BAD}) = x$ ve
 $m(\widehat{DCB}) = 20^\circ$ ise,
 $m(\widehat{DAC}) = \alpha$ kaç derecedir?



- A) 50 B) 60 C) 70 D) 80 E) 85

23. Şekilde,

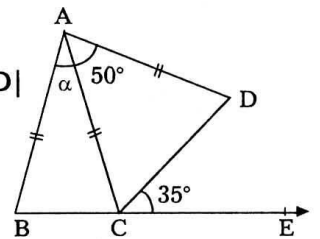
$[AH] \perp [BC]$
 $|BH| = |HC|$
 $m(\widehat{ABP}) = 10^\circ$
 $m(\widehat{PBC}) = 30^\circ$ ve
 $m(\widehat{PCA}) = 5^\circ$ ise,
 $m(\widehat{PAC}) = \alpha$
kaç derecedir?



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

24. Şekilde,

B, C, E noktaları
doğrusal
 $|AB| = |AC| = |AD|$
 $m(\widehat{DAC}) = 50^\circ$ ve
 $m(\widehat{DCE}) = 35^\circ$ ise,
 $m(\widehat{BAC}) = \alpha$
kaç derecedir?



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

Test 3

1. Şekilde,

$[BF]$ ve $[DC]$

açıortay

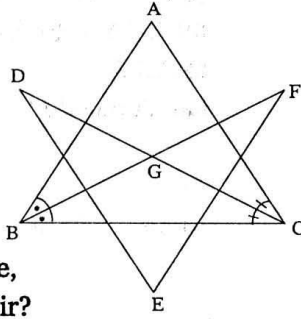
$m(\widehat{BAC}) = 4x - 10^\circ$

$m(\widehat{BFE}) = x + 10^\circ$

$m(\widehat{EDC}) = 2x + 5^\circ$ ve

$m(\widehat{DEF}) = 2x + 10^\circ$ ise,

$m(\widehat{BAC})$ kaç derecedir?



- A) 40 B) 50 C) 55 D) 60 E) 70

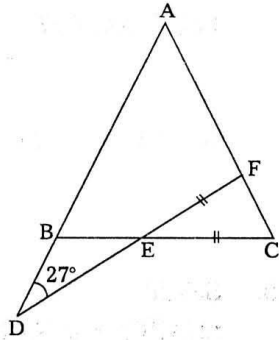
2. Şekilde,

$|AB| = |AC|$

$|EF| = |EC|$ ve

$m(\widehat{ADF}) = 27^\circ$ ise,

$m(\widehat{BAC})$ kaç derecedir?



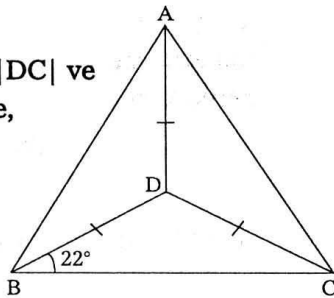
- A) 32 B) 35 C) 42 D) 44 E) 45

3. Şekilde,

$|BD| = |DA| = |DC|$ ve

$m(\widehat{DBC}) = 22^\circ$ ise,

$m(\widehat{BAC})$ kaç derecedir?



- A) 68 B) 70 C) 72 D) 78 E) 80

4. Şekilde,

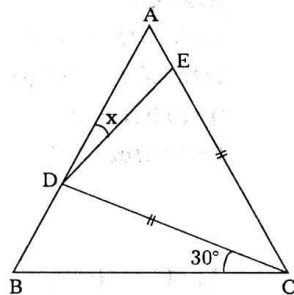
$|AC| = |BC|$

$|EC| = |CD|$ ve

$m(\widehat{DCB}) = 30^\circ$ ise,

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

kaç derecedir?



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

5. Şekilde,

$|AB| = |AD|$

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

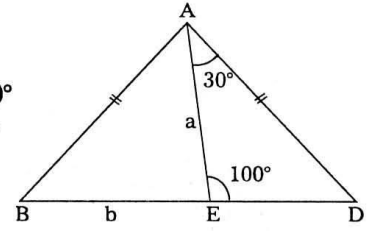
$m(\widehat{EAD}) = 30^\circ$

$|BE| = b$ ve

$|AE| = a$ ise,

aşağıdakilerden

hangisi doğrudur?



- A) $a > b$ B) $a < b$ C) $a = b$
D) $a = 2b$ E) $b = 2a$

6. Şekilde,

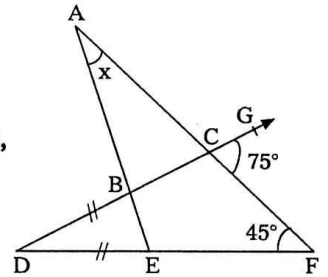
$|DB| = |DE|$

$m(\widehat{GCF}) = 75^\circ$ ve

$m(\widehat{AFD}) = 45^\circ$ ise,

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

kaç derecedir?



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

7. Şekilde,

$|BD| = |DC| = |AC|$

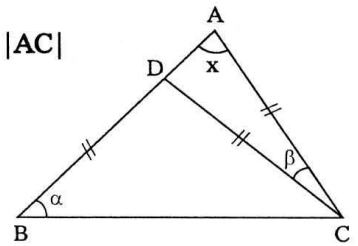
$m(\widehat{ABC}) = \alpha$

$m(\widehat{ACD}) = \beta$ ve

$\alpha - \beta = 20^\circ$ ise,

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

kaç derecedir?



- A) 65 B) 70 C) 75 D) 80 E) 85

8. Şekilde,

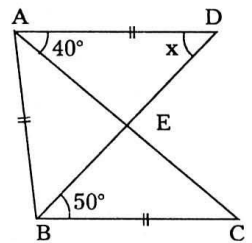
$|AB| = |AD| = |BC|$

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

$m(\widehat{DBC}) = 50^\circ$ ise,

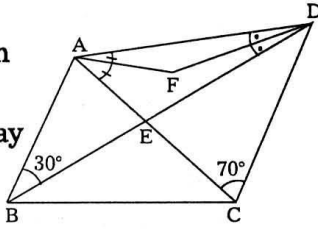
$m(\widehat{ADB}) = x$

kaç derecedir?



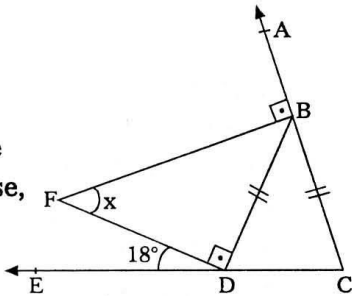
- A) 25 B) 30 C) 35 D) 40 E) 50

9. Şekilde,
D, ABC üçgeninin
dış teğet çemberinin
merkezi
[AF] ve [DF] açıortay
 $m(\widehat{ACD}) = 70^\circ$ ve
 $m(\widehat{ABD}) = 30^\circ$ ise,
 $m(\widehat{AFD})$ kaç derecedir?



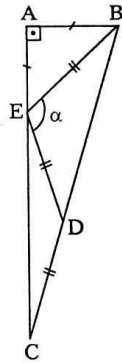
A) 100 B) 115 C) 130 D) 140 E) 145

10. Şekilde,
[FB] \perp [CA]
[FD] \perp [BD]
|BD| = |BC| ve
 $m(\widehat{EDF}) = 18^\circ$ ise,
 $m(\widehat{BFD}) = x$
kaç derecedir?



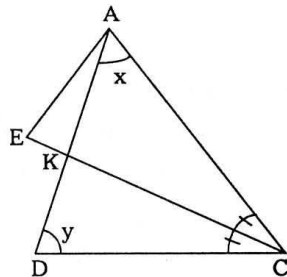
A) 36 B) 38 C) 40 D) 44 E) 48

11. Şekilde,
[BA] \perp [AC]
|AB| = |AE| ve
|DC| = |BE| = |DE| ise,
 $m(\widehat{BED}) = \alpha$ kaç derecedir?



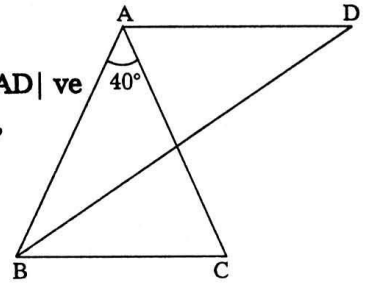
A) 100 B) 110 C) 120 D) 130 E) 140

12. Şekilde,
[CE], açıortay
 $m(\widehat{DAC}) = x$
 $m(\widehat{ADC}) = y$ ve
 $x - y = 28^\circ$ ise,
 $m(\widehat{AKE})$ kaç
derecedir?



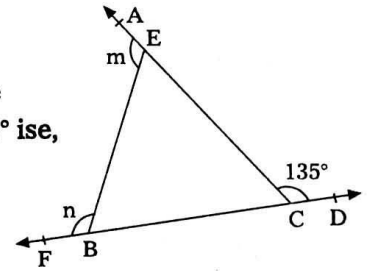
A) 80 B) 86 C) 92 D) 100 E) 104

13. Şekilde,
[AD] // [BC]
|AB| = |AC| = |AD| ve
 $m(\widehat{BAC}) = 40^\circ$ ise,
 $m(\widehat{ADB})$
kaç derecedir?



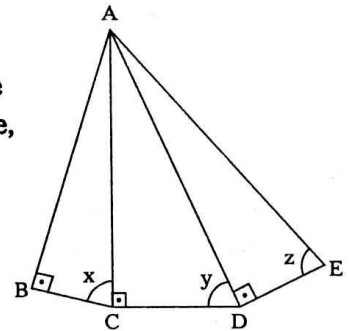
A) 15 B) 20 C) 25 D) 35 E) 50

14. Şekilde,
 $m(\widehat{AEB}) = m$
 $m(\widehat{FBE}) = n$ ve
 $m(\widehat{ACD}) = 135^\circ$ ise,
 $m+n$ toplamı
kaç derecedir?



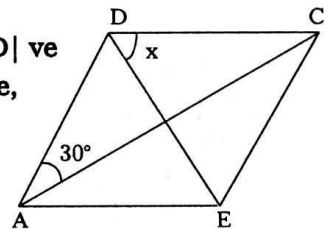
A) 210 B) 225 C) 230 D) 240 E) 255

15. Şekilde,
 $m(\widehat{ABC}) = m(\widehat{ACD}) = m(\widehat{ADE}) = 90^\circ$
 $m(\widehat{BAE}) = 80^\circ$
 $m(\widehat{ACB}) = x$
 $m(\widehat{ADC}) = y$ ve
 $m(\widehat{AED}) = z$ ise,
 $x + y + z$
toplamı kaç
derecedir?



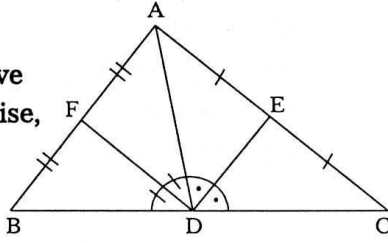
A) 140 B) 150 C) 180 D) 190 E) 200

16. Şekilde,
|AE| = |EC| = |ED| ve
 $m(\widehat{DAC}) = 30^\circ$ ise,
 $m(\widehat{EDC}) = x$
kaç derecedir?



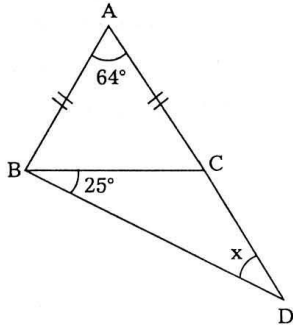
A) 50 B) 60 C) 70 D) 75 E) 80

17. Şekilde,
[DF] ve [DE]
açıortay
 $|AF| = |FB|$ ve
 $|AE| = |EC|$ ise,
 $m(\widehat{BAC})$ kaç
derecedir?



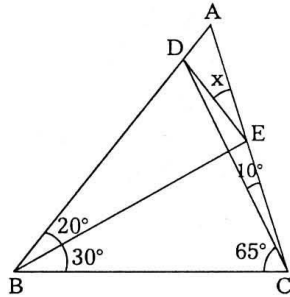
- A) 60 B) 70 C) 75 D) 80 E) 90

18. Şekilde,
 $|AB| = |AC|$
 $m(\widehat{BAD}) = 64^\circ$ ve
 $m(\widehat{CBD}) = 25^\circ$ ise,
 $m(\widehat{BDA}) = x$
kaç derecedir?



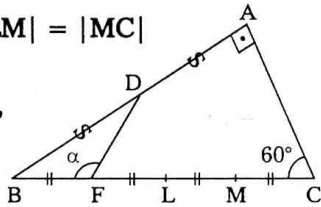
- A) 30 B) 33 C) 35 D) 40 E) 45

19. Şekilde,
 $m(\widehat{ABE}) = 20^\circ$
 $m(\widehat{EBC}) = 30^\circ$
 $m(\widehat{DCB}) = 65^\circ$ ve
 $m(\widehat{DCA}) = 10^\circ$ ise,
 $m(\widehat{AED}) = x$
kaç derecedir?



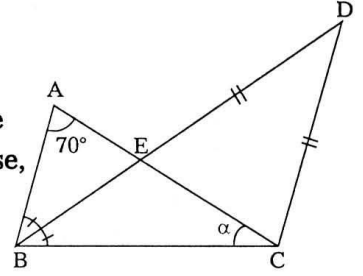
- A) 25 B) 30 C) 35 D) 40 E) 45

20. Şekilde,
[AB] \perp [AC]
 $|BF| = |FL| = |LM| = |MC|$
 $|AD| = |DB|$ ve
 $m(\widehat{ACB}) = 60^\circ$ ise,
 $m(\widehat{DFB}) = \alpha$
kaç derecedir?



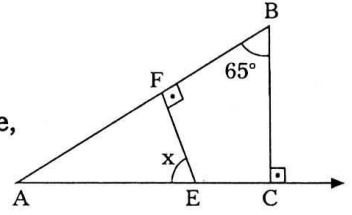
- A) 110 B) 120 C) 125 D) 130 E) 140

21. Şekilde,
[BD] açıortay
[AB] // [CD]
 $|ED| = |DC|$ ve
 $m(\widehat{BAC}) = 70^\circ$ ise,
 $m(\widehat{ACB}) = \alpha$
kaç derecedir?



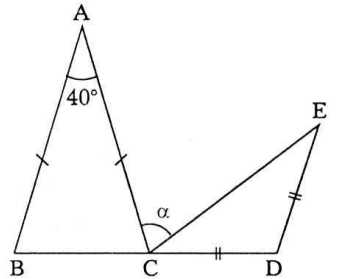
- A) 12 B) 15 C) 20 D) 30 E) 35

22. Şekilde,
[AB] \perp [EF]
[BC] \perp [AC] ve
 $m(\widehat{ABC}) = 65^\circ$ ise,
 $m(\widehat{AEF}) = x$
kaç derecedir?



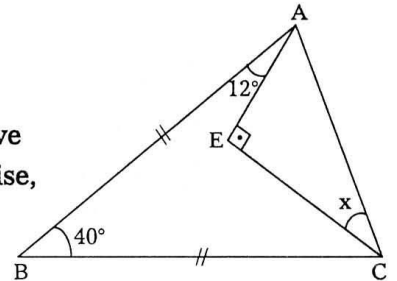
- A) 65 B) 70 C) 75 D) 80 E) 85

23. Şekilde,
B, C, D noktaları
doğrusal
[AB] // [ED]
 $|AB| = |AC|$
 $|CD| = |ED|$ ve
 $m(\widehat{BAC}) = 40^\circ$ ise,
 $m(\widehat{ACE}) = \alpha$ kaç derecedir?



- A) 55 B) 60 C) 65 D) 70 E) 75

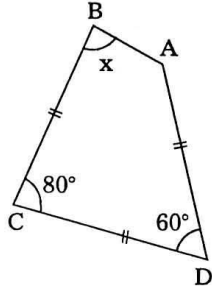
24. Şekilde,
[AE] \perp [EC]
 $|AB| = |BC|$
 $m(\widehat{BAE}) = 12^\circ$ ve
 $m(\widehat{ABC}) = 40^\circ$ ise,
 $m(\widehat{ACE}) = x$
kaç derecedir?



- A) 19 B) 22 C) 25 D) 28 E) 32

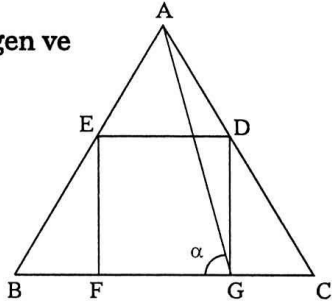
Test 4

1. Şekilde,
 $|BC| = |CD| = |AD|$
 $m(\widehat{BCD}) = 80^\circ$ ve
 $m(\widehat{ADC}) = 60^\circ$ ise,
 $m(\widehat{CBA}) = x$
 kaç derecedir?



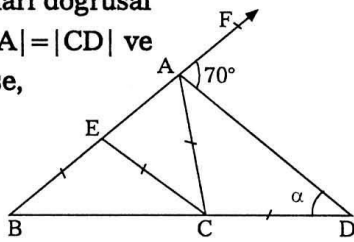
- A) 40 B) 50 C) 60 D) 70 E) 80

2. Şekilde,
 ABC eşkenar üçgen ve
 DEFG kare ise,
 $m(\widehat{AGB}) = \alpha$
 kaç derecedir?



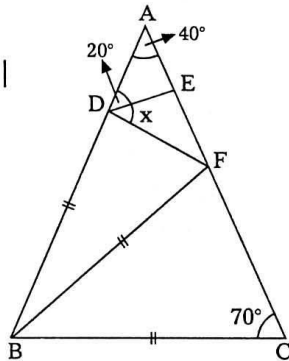
- A) 45 B) 50 C) 60 D) 70 E) 75

3. Şekilde,
 F, A, E, B noktaları doğrusal
 $|BE| = |EC| = |CA| = |CD|$ ve
 $m(\widehat{FAD}) = 70^\circ$ ise,
 $m(\widehat{ADB}) = \alpha$
 kaç derecedir?



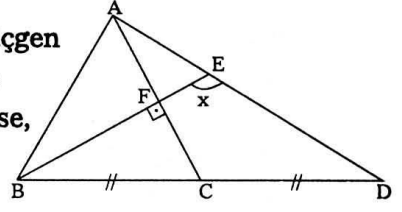
- A) 20 B) 30 C) 40 D) 50 E) 60

4. Şekilde,
 $|DB| = |BF| = |BC|$
 $m(\widehat{ACB}) = 70^\circ$
 $m(\widehat{BAC}) = 40^\circ$ ve
 $m(\widehat{ADE}) = 20^\circ$ ise,
 $m(\widehat{EDF}) = x$
 kaç derecedir?



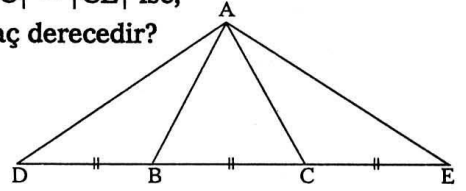
- A) 80 B) 85 C) 90 D) 95 E) 100

5. Şekilde,
 ABC eşkenar üçgen
 $[BE] \perp [AC]$ ve
 $|BC| = |CD|$ ise,
 $m(\widehat{BED}) = x$
 kaç derecedir?



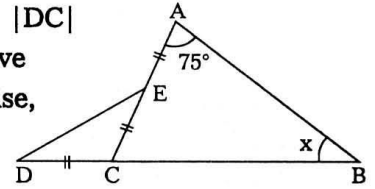
- A) 100 B) 105 C) 110 D) 120 E) 135

6. Şekilde,
 ABC eşkenar üçgen ve
 $|DB| = |BC| = |CE|$ ise,
 $m(\widehat{DAE})$ kaç derecedir?



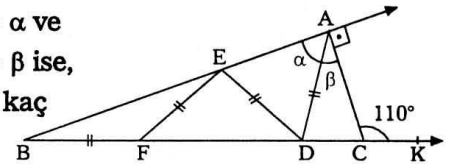
- A) 100 B) 105 C) 110 D) 115 E) 120

7. Şekilde,
 $|AE| = |EC| = |DC|$
 $|AB| = 2|DE|$ ve
 $m(\widehat{CAB}) = 75^\circ$ ise,
 $m(\widehat{ABD}) = x$
 kaç derecedir?



- A) 25 B) 30 C) 35 D) 40 E) 45

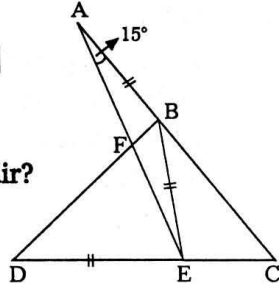
8. Şekilde,
 $[CA] \perp [BA]$
 $|BF| = |FE| = |ED| = |DA|$
 $m(\widehat{ACK}) = 110^\circ$
 $m(\widehat{BAD}) = \alpha$ ve
 $m(\widehat{DAC}) = \beta$ ise,
 $\alpha - \beta$ farkı kaç
 derecedir?



- A) 10 B) 15 C) 20 D) 30 E) 35

9. Şekilde,

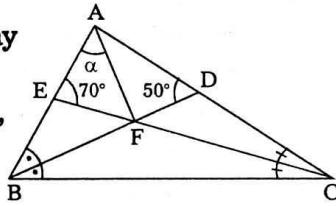
$|AB| = |BE| = |DE|$
 $|BD| = |BC|$ ve
 $m(\widehat{EAC}) = 15^\circ$ ise,
 $m(\widehat{AED})$ kaç derecedir?



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

10. Şekilde,

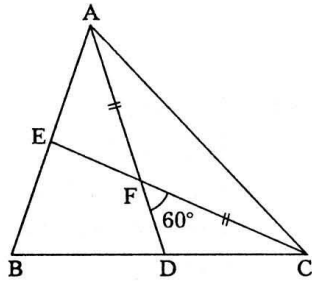
$[CE], [BD]$ açıortay
 $m(\widehat{AEC}) = 70^\circ$ ve
 $m(\widehat{ADB}) = 50^\circ$ ise,
 $m(\widehat{BAF}) = \alpha$
 kaç derecedir?



- A) 20 B) 30 C) 40 D) 50 E) 60

11. Şekilde,

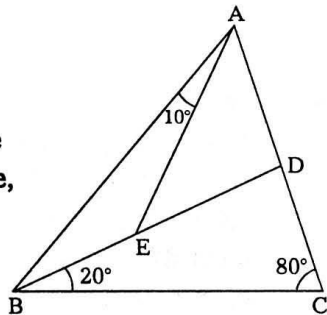
$|AF| = |FC|$
 $|EC| = |BC|$
 $|AB| = |AD|$ ve
 $m(\widehat{DFC}) = 60^\circ$ ise,
 $m(\widehat{BDA})$
 kaç derecedir?



- A) 85 B) 80 C) 75 D) 70 E) 65

12. Şekilde,

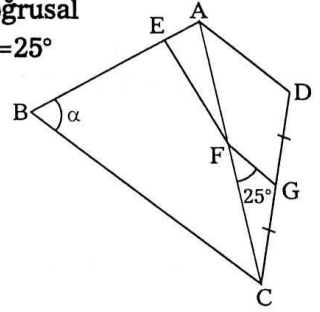
$|BD| = |AC|$
 $m(\widehat{BAE}) = 10^\circ$
 $m(\widehat{DBC}) = 20^\circ$ ve
 $m(\widehat{ACB}) = 80^\circ$ ise,
 $m(\widehat{AED})$
 kaç derecedir?



- A) 30 B) 40 C) 50 D) 60 E) 70

13. Şekilde,

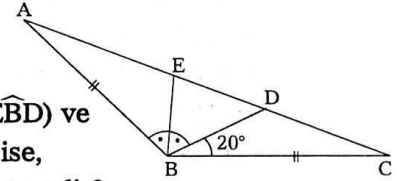
$[FG] \parallel [AD] \parallel [BC]$
 A, F, C noktaları doğrusal
 $m(\widehat{GFC}) = 5m(\widehat{EFA}) = 25^\circ$
 $|DG| = |GC|$ ve
 $2|EF| = |BC|$ ise,
 $m(\widehat{ABC}) = \alpha$
 kaç derecedir?



- A) 40 B) 50 C) 60 D) 70 E) 80

14. Şekilde,

$|AB| = |BC|$
 $m(\widehat{ABE}) = m(\widehat{EBD})$ ve
 $m(\widehat{DBC}) = 20^\circ$ ise,
 $m(\widehat{BEC})$ kaç derecedir?

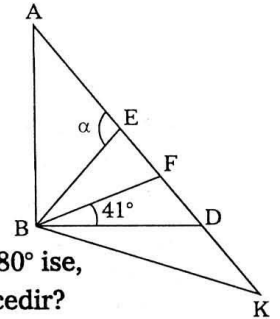


- A) 20 B) 30 C) 40 D) 60 E) 80

15. Şekilde,

$|ED| = |BE|$
 $|FB| = |FK|$
 $m(\widehat{FBD}) = 41^\circ$ ve

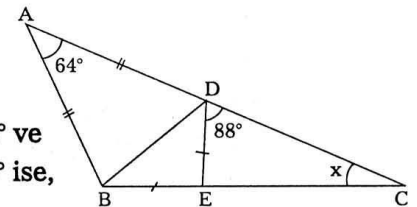
$m(\widehat{EBF}) + m(\widehat{AKB}) = 80^\circ$ ise,
 $m(\widehat{AEB}) = \alpha$ kaç derecedir?



- A) 118 B) 126 C) 134 D) 142 E) 146

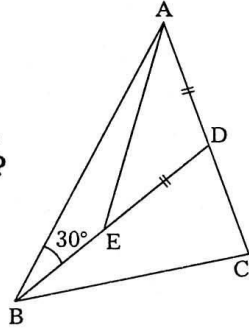
16. Şekilde,

$|AB| = |AD|$
 $|BE| = |ED|$
 $m(\widehat{EDC}) = 88^\circ$ ve
 $m(\widehat{BAC}) = 64^\circ$ ise,
 $m(\widehat{ACB}) = x$
 kaç derecedir?



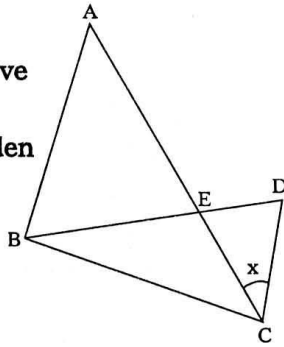
- A) 20 B) 24 C) 28 D) 32 E) 34

17. Şekilde,
 $m(\widehat{ABD}) = 30^\circ$
 $|AD| = |DE|$ ve
 $|AC| = |BC| = |BD|$ ise,
 $m(\widehat{EAC})$ kaç derecedir?



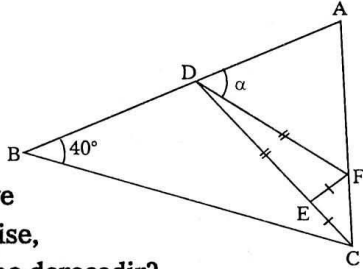
- A) 30 B) 40 C) 50 D) 60 E) 70

18. Şekilde,
 $|AB| = |BC| = |BD|$ ve
 $m(\widehat{ACD}) = x$ ise,
 ABD açısının x türünden
 eşiti aşağıdakilerden
 hangisidir?



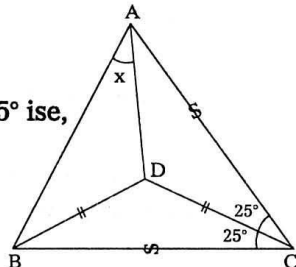
- A) $\frac{x}{2}$ B) x C) $\frac{3x}{2}$ D) 2x E) 3x

19. Şekilde,
 $|AB| = |BC|$
 $|DC| = |AC|$
 $|EF| = |EC|$
 $|ED| = |DF|$ ve
 $m(\widehat{ABC}) = 40^\circ$ ise,
 $m(\widehat{ADF}) = \alpha$ kaç derecedir?



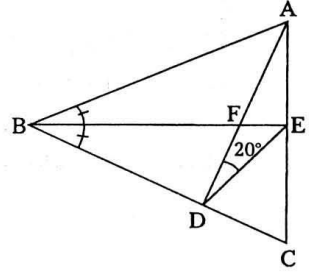
- A) 60 B) 50 C) 40 D) 30 E) 20

20. Şekilde,
 $|AC| = |BC|$
 $|BD| = |DC|$ ve
 $m(\widehat{BCD}) = m(\widehat{DCA}) = 25^\circ$ ise,
 $m(\widehat{BAD}) = x$
 kaç derecedir?



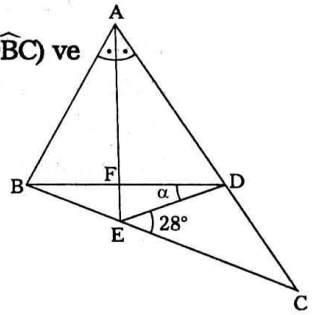
- A) 10 B) 20 C) 30 D) 40 E) 50

21. Şekilde,
 F, ABC üçgeninin
 diklik merkezi
 $[BE]$ açıortay ve
 $m(\widehat{ADE}) = 20^\circ$ ise,
 $m(\widehat{ABC})$
 kaç derecedir?



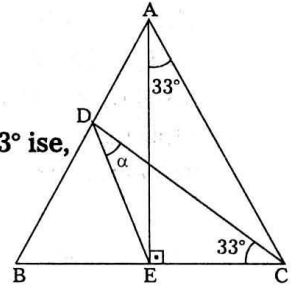
- A) 40 B) 45 C) 50 D) 55 E) 60

22. Şekilde,
 $m(\widehat{BAE}) = m(\widehat{EAC})$
 $m(\widehat{ABD}) - m(\widehat{ACB}) = m(\widehat{DBC})$ ve
 $m(\widehat{DEC}) = 28^\circ$ ise,
 $m(\widehat{BDE}) = \alpha$
 kaç derecedir?



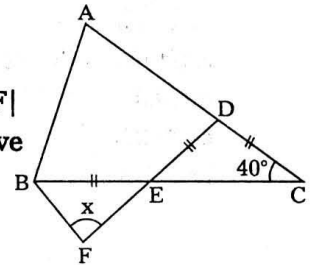
- A) 14 B) 18 C) 24 D) 28 E) 35

23. Şekilde,
 $[AE] \perp [BC]$
 $|AB| = |AC|$ ve
 $m(\widehat{BCD}) = m(\widehat{EAC}) = 33^\circ$ ise,
 $m(\widehat{EDC}) = \alpha$
 kaç derecedir?



- A) 27 B) 33 C) 37 D) 43 E) 67

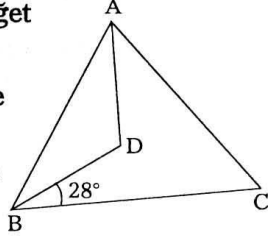
24. Şekilde,
 $[BC] \cap [FD] = \{E\}$
 $|AB| = |AD| = |DF|$
 $|BE| = |ED| = |DC|$ ve
 $m(\widehat{ACB}) = 40^\circ$ ise,
 $m(\widehat{BFD}) = x$
 kaç derecedir?



- A) 80 B) 74 C) 70 D) 66 E) 65

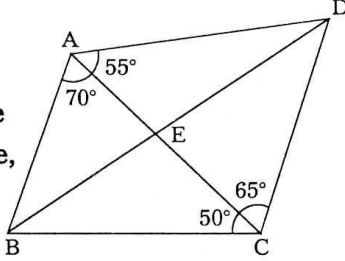
Test 5

1. Şekilde,
D, ABC üçgeninin iç teğet
çemberinin merkezi
 $m(\widehat{ADB}) = 3m(\widehat{DAC})$ ve
 $m(\widehat{DBC}) = 28^\circ$ ise,
 $m(\widehat{ACB})$ kaç derecedir?



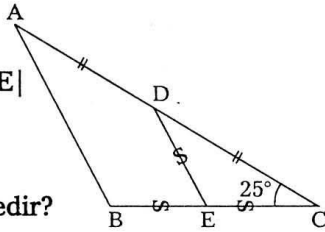
A) 42 B) 44 C) 46 D) 48 E) 50

2. Şekilde,
 $m(\widehat{BAC}) = 70^\circ$
 $m(\widehat{ACD}) = 65^\circ$
 $m(\widehat{CAD}) = 55^\circ$ ve
 $m(\widehat{ACB}) = 50^\circ$ ise,
 $m(\widehat{ADB})$
kaç derecedir?



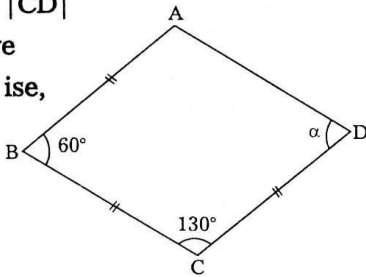
A) 15 B) 25 C) 35 D) 45 E) 50

3. Şekilde,
 $|BE| = |CE| = |DE|$
 $|AD| = |CD|$ ve
 $m(\widehat{ACB}) = 25^\circ$ ise,
 $m(\widehat{ABC})$ kaç derecedir?



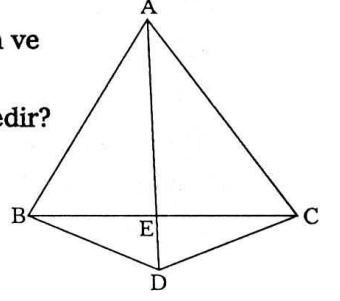
A) 95 B) 110 C) 115 D) 130 E) 135

4. Şekilde,
 $|AB| = |BC| = |CD|$
 $m(\widehat{ABC}) = 60^\circ$ ve
 $m(\widehat{BCD}) = 130^\circ$ ise,
 $m(\widehat{ADC}) = \alpha$
kaç derecedir?



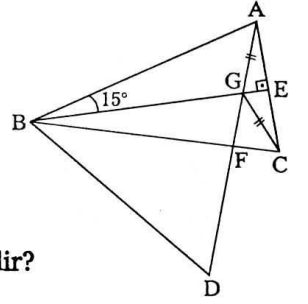
A) 48 B) 52 C) 55 D) 60 E) 67

5. Şekilde,
ABC eşkenar üçgen ve
 $|AD| = |BC|$ ise,
 $m(\widehat{BDC})$ kaç derecedir?



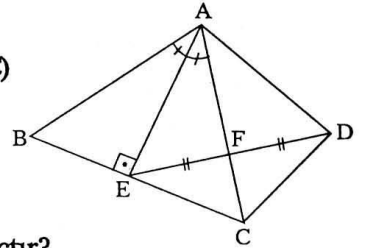
A) 110 B) 120 C) 130 D) 140 E) 150

6. Şekilde,
 $[BE] \perp [AC]$
 $m(\widehat{ABE}) = 15^\circ$
 $m(\widehat{BAD}) = 2m(\widehat{DAC})$
 $|AG| = |GC|$ ve
 $|BC| = |AD|$ ise,
 $m(\widehat{CBD})$ kaç derecedir?



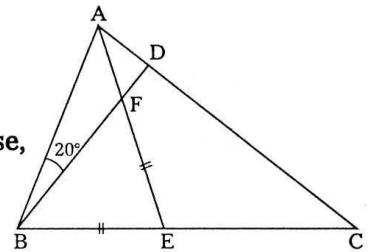
A) 15 B) 30 C) 35 D) 45 E) 60

7. Şekilde,
 $[AE] \perp [BC]$
 $m(\widehat{BAE}) = m(\widehat{EAC})$
 $m(\widehat{BAD}) = 120^\circ$
 $|BC| = 2|DC|$ ve
 $|EF| = |FD|$ ise,
 $\frac{m(\widehat{ABC})}{m(\widehat{ADC})}$ oranı kaçtır?



A) $\frac{1}{3}$ B) $\frac{1}{2}$ C) $\frac{5}{9}$ D) $\frac{2}{3}$ E) $\frac{5}{6}$

8. Şekilde,
 $|BE| = |EF|$
 $|EC| = |AE|$ ve
 $m(\widehat{ABD}) = 20^\circ$ ise,
 $m(\widehat{BAC})$
kaç derecedir?



A) 40 B) 50 C) 60 D) 70 E) 80

9. Şekilde,

$$[EF] \perp [AB]$$

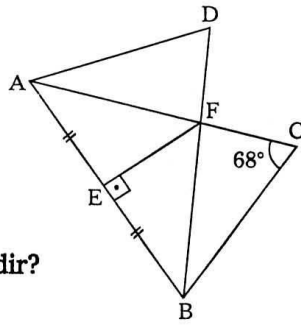
$$|AF| = |CB|$$

$$|AE| = |EB|$$

$$|AB| = |DB| \text{ ve}$$

$$m(\widehat{ACB}) = 68^\circ \text{ ise,}$$

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



- A) 26 B) 34 C) 39 D) 42 E) 45

10. Şekilde,

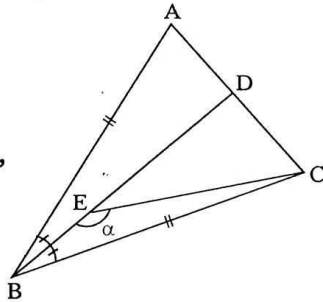
$$[BD] \text{ açıortay}$$

$$|AB| = |BC| \text{ ve}$$

$$|AC| = |EC| \text{ ise,}$$

$$m(\widehat{BEC}) = \alpha$$

$$\text{kaç derecedir?}$$



- A) 110 B) 120 C) 130 D) 140 E) 150

11. Şekilde,

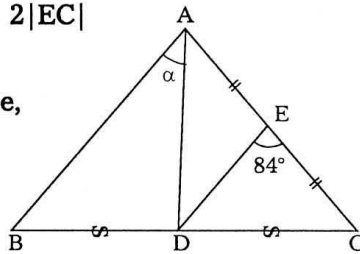
$$|AB| = 2|AE| = 2|EC|$$

$$|BD| = |DC| \text{ ve}$$

$$m(\widehat{CED}) = 84^\circ \text{ ise,}$$

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

$$\text{kaç derecedir?}$$



- A) 36 B) 38 C) 40 D) 42 E) 44

12. Şekilde,

$$[BE] \perp [EC]$$

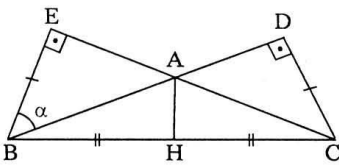
$$[BD] \perp [DC]$$

$$|EB| = |DC|$$

$$|BH| = |HC| \text{ ve}$$

$$m(\widehat{HAC}) = 4m(\widehat{DBC}) \text{ ise,}$$

$$m(\widehat{EBD}) = \alpha \text{ kaç derecedir?}$$



- A) 72 B) 60 C) 54 D) 36 E) 30

13. Şekilde,

$$[DE] \text{ açıortay}$$

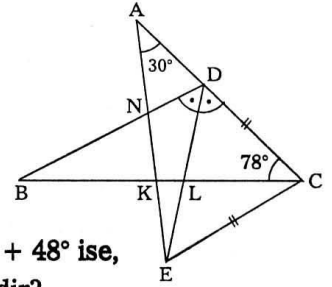
$$|CD| = |CE|$$

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

$$m(\widehat{ACB}) = 78^\circ \text{ ve}$$

$$m(\widehat{BNE}) = m(\widehat{BCE}) + 48^\circ \text{ ise,}$$

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



- A) 108 B) 112 C) 123 D) 127 E) 130

14. Şekilde,

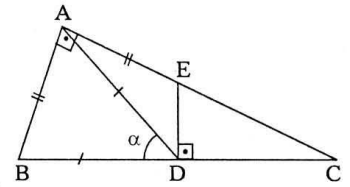
$$[AB] \perp [AC]$$

$$[ED] \perp [BC]$$

$$|AD| = |BD| \text{ ve}$$

$$|AB| = |AE| \text{ ise,}$$

$$m(\widehat{ADB}) = \alpha \text{ kaç derecedir?}$$



- A) 45 B) 30 C) 22,5 D) 18 E) 15

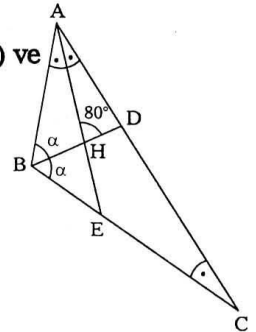
15. Şekilde,

$$m(\widehat{BAE}) = m(\widehat{EAC}) = m(\widehat{BCA}) \text{ ve}$$

$$m(\widehat{AHD}) = 80^\circ \text{ ise,}$$

$$m(\widehat{ABD}) = m(\widehat{DBC}) = \alpha$$

$$\text{kaç derecedir?}$$



- A) 45 B) 48 C) 50 D) 52 E) 60

16. Şekilde,

$$A, E, C$$

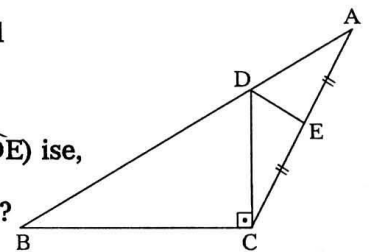
$$\text{noktaları doğrusal}$$

$$[DC] \perp [BC]$$

$$|AE| = |EC| \text{ ve}$$

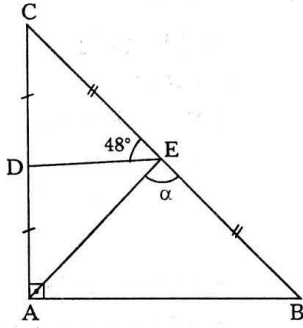
$$2m(\widehat{ABC}) = m(\widehat{ADE}) \text{ ise,}$$

$$\frac{|BD|}{|DE|} \text{ oranı kaçtır?}$$



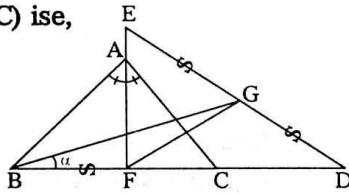
- A) 2 B) 3 C) 4 D) 5 E) 6

17. Şekildeki ABC üçgeninde,
 $[AB] \perp [AC]$
 $|BE| = |CE|$
 $|AD| = |DC|$ ve
 $m(\widehat{CED}) = 48^\circ$ ise,
 $m(\widehat{AEB}) = \alpha$
 kaç derecedir?



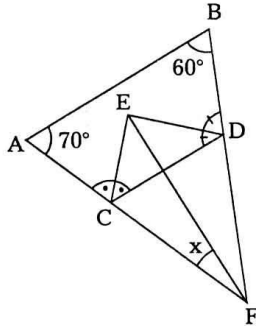
- A) 72 B) 84 C) 86 D) 88 E) 90

18. Şekilde,
 $|AB| = |AC|$
 $|BF| = |EF| = |GD| = |EG|$ ve
 $m(\widehat{BAF}) = m(\widehat{FAC})$ ise,
 $m(\widehat{GBD}) = \alpha$
 kaç derecedir?



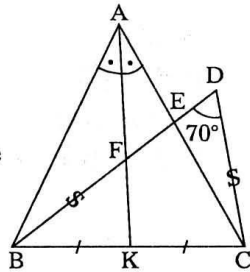
- A) 10 B) 15 C) 20 D) 25 E) 30

19. Şekilde,
 $m(\widehat{ACE}) = m(\widehat{ECD})$
 $m(\widehat{BDE}) = m(\widehat{EDC})$
 $m(\widehat{FAB}) = 70^\circ$ ve
 $m(\widehat{FBA}) = 60^\circ$ ise,
 $m(\widehat{AFE}) = x$
 kaç derecedir?



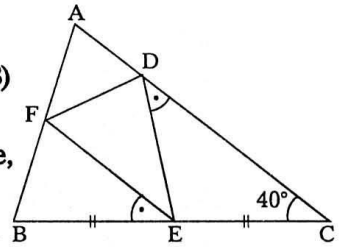
- A) 20 B) 21 C) 22 D) 23 E) 25

20. Şekilde,
 $|BK| = |KC|$
 $|BF| = |DC|$
 $m(\widehat{BAK}) = m(\widehat{KAC})$ ve
 $m(\widehat{BDC}) = 70^\circ$ ise,
 $m(\widehat{DBC})$ kaç
 derecedir?



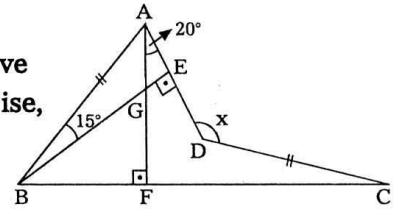
- A) 15 B) 20 C) 25 D) 30 E) 35

21. Şekilde,
 $|BE| = |EC|$
 $|AC| = |BC|$
 $m(\widehat{EDC}) = m(\widehat{FEB})$
 $m(\widehat{ACB}) = 40^\circ$ ve
 $m(\widehat{AFE}) = 110^\circ$ ise,
 $m(\widehat{ADF})$ kaç
 derecedir?



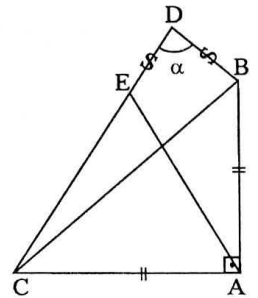
- A) 50 B) 60 C) 65 D) 70 E) 80

22. Şekilde,
 $[BE] \perp [AD]$
 $[AF] \perp [BC]$
 $|AE| = |ED|$
 $|AB| = |DC|$
 $m(\widehat{ABE}) = 15^\circ$ ve
 $m(\widehat{FAD}) = 20^\circ$ ise,
 $m(\widehat{ADC}) = x$
 kaç derecedir?



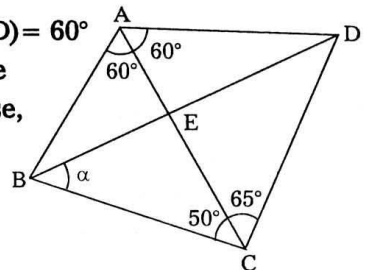
- A) 110 B) 115 C) 120 D) 135 E) 145

23. Şekilde,
 AEC eşkenar üçgen
 $[BA] \perp [AC]$
 $|AB| = |AC|$ ve
 $|DB| = |DE|$ ise,
 $m(\widehat{BDC}) = \alpha$
 kaç derecedir?



- A) 60 B) 75 C) 80 D) 90 E) 95

24. Şekilde,
 $m(\widehat{BAC}) = m(\widehat{CAD}) = 60^\circ$
 $m(\widehat{BCA}) = 50^\circ$ ve
 $m(\widehat{ACD}) = 65^\circ$ ise,
 $m(\widehat{DBC}) = \alpha$
 kaç derecedir?



- A) 30 B) 35 C) 40 D) 45 E) 55

Test 6

1. Şekilde,

$[AC] \perp [BC]$

$|AE| = |EC|$

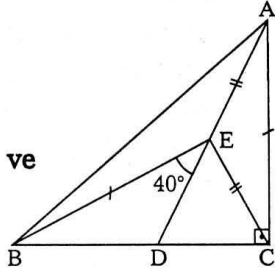
$|AC| = |BE|$

$3m(\widehat{ABE}) = m(\widehat{BAD})$ ve

$m(\widehat{BED}) = 40^\circ$ ise,

$m(\widehat{BAC})$

kaç derecedir?



- A) 40 B) 50 C) 60 D) 70 E) 80

2. Şekildeki ABC üçgeninde,

$[CF] \perp [AB]$

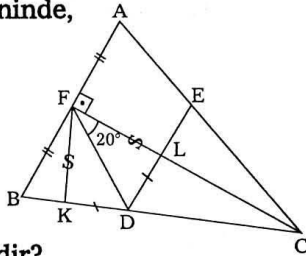
$|FL| = |FK|$

$|LD| = |KD|$

$|AF| = |FB|$ ve

$m(\widehat{CFD}) = 20^\circ$ ise,

$m(\widehat{DEC})$ kaç derecedir?



- A) 10 B) 20 C) 30 D) 40 E) 50

3. Şekilde,

$[DH] \perp [BC]$

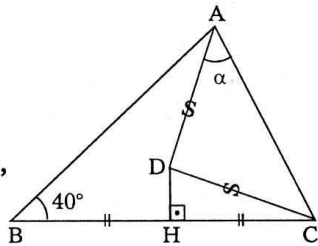
$|BH| = |HC|$

$|AD| = |DC|$ ve

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

$m(\widehat{DAC}) = \alpha$

kaç derecedir?



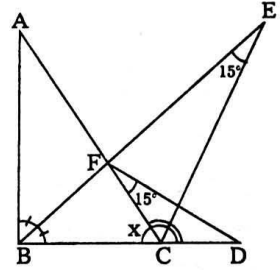
- A) 30 B) 35 C) 40 D) 45 E) 50

4. Şekilde,

$[BE]$ ve $[CE]$

açıortay

$|BF| = |FD|$ ve



$m(\widehat{BEC}) = m(\widehat{CFD}) = 15^\circ$ ise,

$m(\widehat{BCA}) = x$ kaç derecedir?

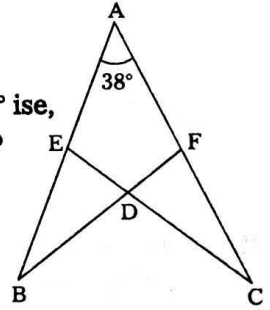
- A) 60 B) 50 C) 45 D) 40 E) 35

5. Şekilde,

$m(\widehat{BAC}) = 38^\circ$ ve

$m(\widehat{BEC}) + m(\widehat{BFC}) = 160^\circ$ ise,

$m(\widehat{EDB})$ kaç derecedir?



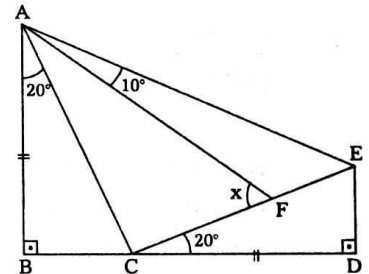
- A) 76 B) 72 C) 66 D) 58 E) 54

6. Şekilde,

$[AB] \perp [BD]$

$[AB] \parallel [DE]$

$|AB| = |CD|$ ve

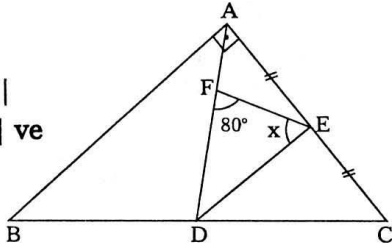


$m(\widehat{BAC}) = m(\widehat{DCE}) = 2m(\widehat{FAE}) = 20^\circ$ ise,

$m(\widehat{AFC}) = x$ kaç derecedir?

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

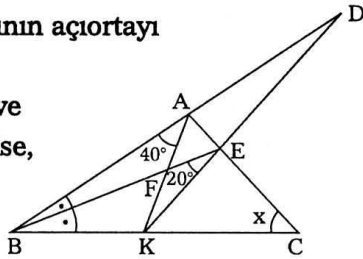
7. Şekilde,
 $[BA] \perp [CA]$
 $|AD| = |BD|$
 $|AE| = |EC|$ ve



$m(\widehat{EFD}) = 2m(\widehat{ABC}) = 80^\circ$ ise,
 $m(\widehat{DEF}) = x$ kaç derecedir?

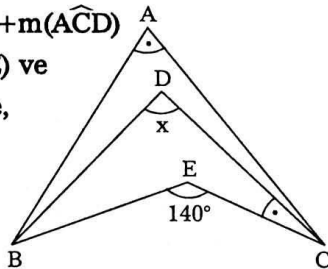
- A) 45 B) 50 C) 55 D) 60 E) 65

8. Şekilde,
 $[BE]$, DBC açısının açıortayı
 $|BE| = |ED|$
 $m(\widehat{BAK}) = 40^\circ$ ve
 $m(\widehat{BEK}) = 20^\circ$ ise,
 $m(\widehat{ACB}) = x$
 kaç derecedir?



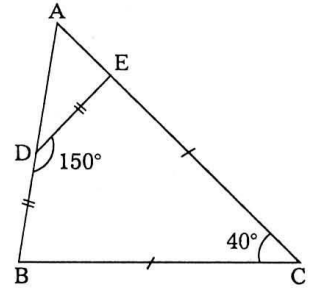
- A) 30 B) 35 C) 40 D) 45 E) 50

9. Şekilde,
 $m(\widehat{DBE}) = m(\widehat{ABD}) + m(\widehat{ACD})$
 $m(\widehat{BAC}) = m(\widehat{DCE})$ ve
 $m(\widehat{BEC}) = 140^\circ$ ise,
 $m(\widehat{BDC}) = x$
 kaç derecedir?



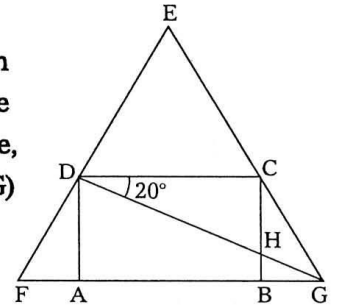
- A) 70 B) 80 C) 90 D) 100 E) 120

10. Şekilde,
 $|DB| = |DE|$
 $|EC| = |BC|$
 $m(\widehat{ACB}) = 40^\circ$ ve
 $m(\widehat{BDE}) = 150^\circ$ ise,
 $m(\widehat{ABC}) - m(\widehat{BAC})$
 farkı kaç derecedir?



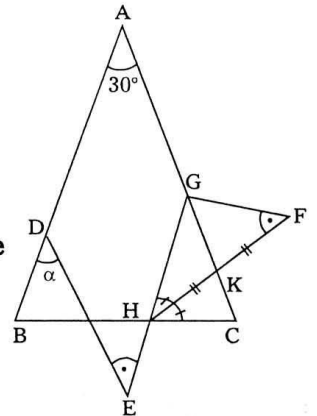
- A) 20 B) 25 C) 30 D) 35 E) 40

11. Şekilde,
 $ABCD$ dikdörtgen
 $2|CG| = |DH|$ ve
 $m(\widehat{CDG}) = 20^\circ$ ise,
 $m(\widehat{FEG}) + m(\widehat{EFG})$
 toplamı
 kaç derecedir?



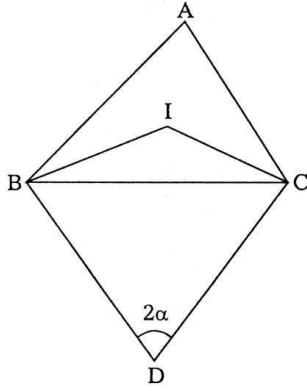
- A) 100 B) 115 C) 120 D) 130 E) 135

12. Şekilde,
 $[EG] \perp [GF]$
 $[HF]$ açıortay
 $|AB| = |AC|$
 $|HK| = |KF|$
 $m(\widehat{GFH}) = m(\widehat{GED})$ ve
 $m(\widehat{BAC}) = 30^\circ$ ise,
 $m(\widehat{BDE}) = \alpha$
 kaç derecedir?



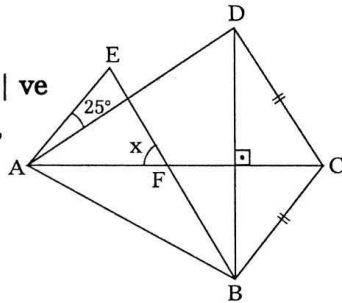
- A) 30 B) 35 C) 40 D) 45 E) 50

13. Şekilde,
I, ABC üçgeninin iç teğet çemberinin merkezi
D, ABC üçgeninin dış teğet çemberinin merkezi ve
 $m(\widehat{BDC}) = 2\alpha$ ise,
 $m(\widehat{ABI}) + m(\widehat{BCI})$ toplamının
 α türünden eşiti aşağıdakilerden hangisidir?



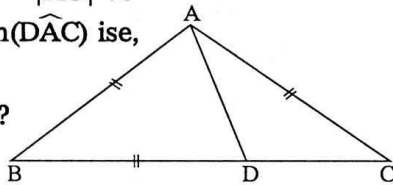
- A) α B) 2α C) 4α
D) $90^\circ - \alpha$ E) $90^\circ - 2\alpha$

14. Şekilde,
 $[AC] \perp [BD]$
 $|DC| = |BC|$
 $|AD| = |BD| = |BE|$ ve
 $m(\widehat{EAD}) = 25^\circ$ ise,
 $m(\widehat{AFE}) = x$
kaç derecedir?



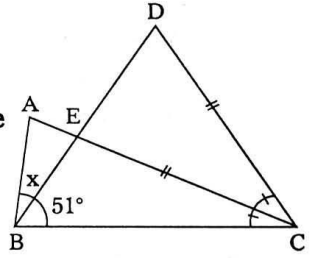
- A) 25 B) 30 C) 40 D) 45 E) 60

15. Şekilde,
B, D, C noktaları doğrusal
 $|AB| = |BD| = |AC|$ ve
 $m(\widehat{ADC}) = 3m(\widehat{DAC})$ ise,
 $m(\widehat{DAC})$
kaç derecedir?



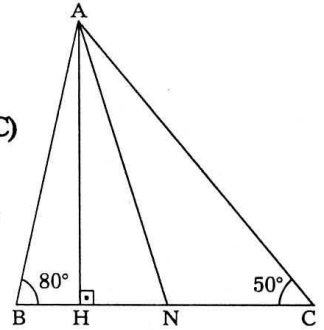
- A) 10 B) 18 C) 20 D) 32 E) 36

16. Şekilde,
 $|AC| = |BC|$
 $|DC| = |CE|$
 $m(\widehat{DCA}) = m(\widehat{ACB})$ ve
 $m(\widehat{DBC}) = 51^\circ$ ise,
 $m(\widehat{ABD}) = x$
kaç derecedir?



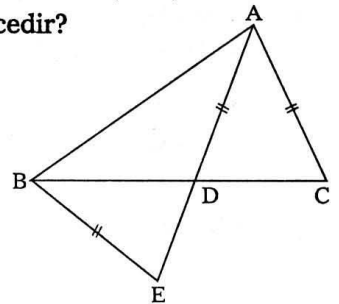
- A) 26 B) 30 C) 34 D) 40 E) 50

17. Şekilde,
 $[AH] \perp [BC]$
 $m(\widehat{BAN}) = m(\widehat{NAC})$
 $m(\widehat{CBA}) = 80^\circ$ ve
 $m(\widehat{BCA}) = 50^\circ$ ise,
 $m(\widehat{HAN})$
kaç derecedir?



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

18. Şekilde,
 $|BE| = |AD| = |AC|$ ve
 $m(\widehat{ACB}) = 2m(\widehat{BAE}) = 2m(\widehat{CBE})$ ise,
 $m(\widehat{BAC})$ kaç derecedir?



- A) 56 B) 68 C) 72 D) 90 E) 98

19. Şekilde,

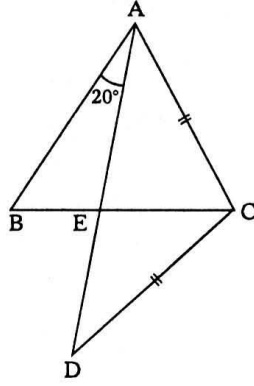
$$|AB| = |BC|$$

$$|AC| = |DC|$$

$$m(\widehat{BAD}) = 20^\circ \text{ ve}$$

$$m(\widehat{AEB}) = m(\widehat{ACD}) \text{ ise,}$$

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



- A) 70 B) 60 C) 50 D) 40 E) 30

20. Şekilde,

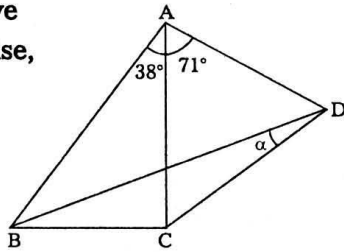
$$m(\widehat{BCA}) + 2m(\widehat{ACD}) = 180^\circ$$

$$m(\widehat{BAC}) = 38^\circ \text{ ve}$$

$$m(\widehat{CAD}) = 71^\circ \text{ ise,}$$

$$m(\widehat{BDC}) = \alpha$$

$$\text{kaç derecedir?}$$



- A) 33 B) 27 C) 21 D) 19 E) 17

21. Şekilde,

$$|BC| = |AC| = |CD|$$

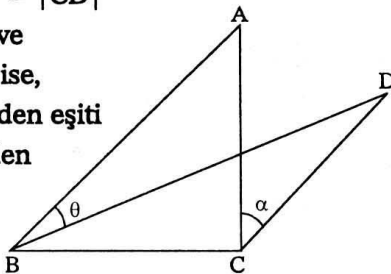
$$m(\widehat{ABD}) = \theta \text{ ve}$$

$$m(\widehat{ACD}) = \alpha \text{ ise,}$$

$$\alpha \text{ nın } \theta \text{ türünden eşiti}$$

$$\text{aşağıdakilerden}$$

$$\text{hangisidir?}$$



- A) $\frac{\theta}{2}$ B) θ C) $\frac{3\theta}{2}$ D) 2θ E) $\frac{5\theta}{2}$

22. Şekilde,

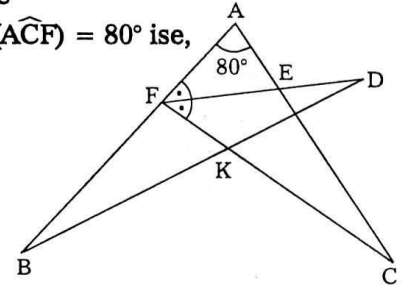
$$[FD], AFC \text{ açısının açıortayı}$$

$$|BF| = |FD| \text{ ve}$$

$$m(\widehat{BAC}) = 4m(\widehat{ACF}) = 80^\circ \text{ ise,}$$

$$m(\widehat{BDF})$$

$$\text{kaç derecedir?}$$



- A) 5 B) 10 C) 15 D) 16 E) 20

23. Şekilde,

$$[AB] \perp [AC]$$

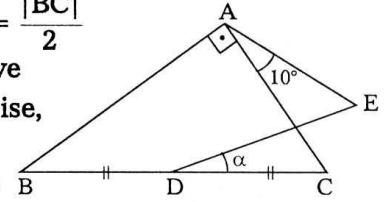
$$|AE| = |ED| = \frac{|BC|}{2}$$

$$|BD| = |DC| \text{ ve}$$

$$m(\widehat{CAE}) = 10^\circ \text{ ise,}$$

$$m(\widehat{EDC}) = \alpha$$

$$\text{kaç derecedir?}$$



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

24. Şekilde,

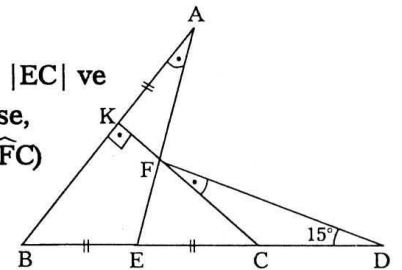
$$[CK] \perp [AB]$$

$$|AK| = |BE| = |EC| \text{ ve}$$

$$m(\widehat{FDB}) = 15^\circ \text{ ise,}$$

$$m(\widehat{BAE}) = m(\widehat{DFC})$$

$$\text{kaç derecedir?}$$



- A) 15 B) 20 C) 25 D) 30 E) 35