coolmatematik

TYT/AYT GEOMETRİ

# ÜÇGENLER

## GENEL TEKRAR TESTİ 2

Adı ve Soyadı _____

Sınıfı / Şubesi _____

Öğrenci Numarası _____

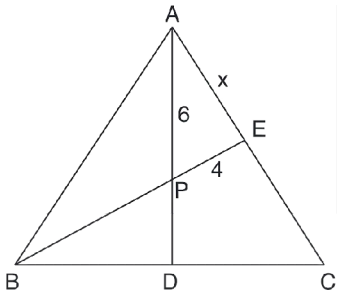
| DERS ADI | SORU SAYISI | TOPLAM SORU | SÜRE (DK.) |
|---|---|---|---|
| TYT/AYT GEOMETRİ | 102 | **102** | **300** |

**ÖĞRENCİLERİN DİKKATİNE**

1. ÜÇGENDE YÜKSEKLİK
2. ÜÇGENDE AÇIORTAY
3. ÜÇGENDE KENARORTAY

| DOĞRU | YANLIŞ | NET | PUAN |
|---|---|---|---|
| | | | |

**1**



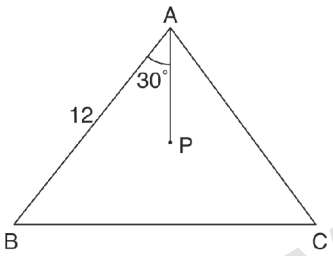

ABC üçgen, P diklik merkezi,

$|AP| = 6$ br, $|EP| = 4$ br

**Yukarıdaki verilere göre, $|AE| = x$ kaç birimdir?**

A) $\sqrt{13}$ B) $\sqrt{5}$ C) $2\sqrt{5}$ D) $\sqrt{15}$ E) $2\sqrt{13}$

**2**

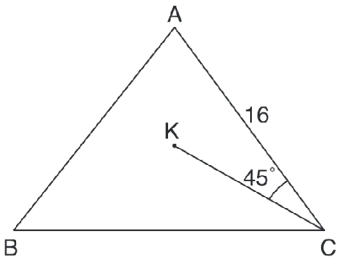



ABC üçgeninde P diklik merkezi, $m(\widehat{BAP}) = 30^\circ$ ve $|AB| = 12$ cm'dir.

**Yukarıdaki verilere göre, [BC] ye ait yükseklik kaç cm'dir?**

A) 12 B) $6\sqrt{3}$ C) 6 D) $2\sqrt{3}$ E) 4

**3**

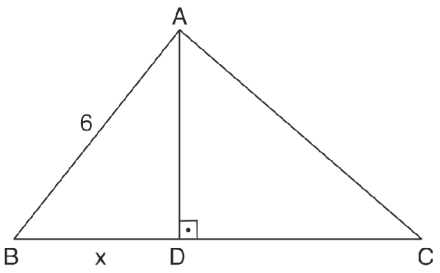



ABC üçgeninde K diklik merkezi, $m(\widehat{ACK}) = 45^\circ$ ve $|AC| = 16$ cm'dir.

**Buna göre, $h_c$ kaç cm'dir?**

A) $4\sqrt{3}$ B) $2\sqrt{2}$ C) $\sqrt{6}$ D) $8\sqrt{2}$ E) $2\sqrt{5}$

**4**



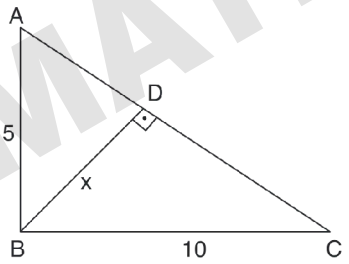

A noktası $\widehat{ABC}$'nin diklik merkezi

$|AB| = 6$ cm, $|BC| = 10$ cm

**Yukarıdaki verilere göre, $|BD| = x$ kaç cm'dir?**

A) 2,4 B) 3,6 C) 3,8 D) 4 E) 4,2

**5**



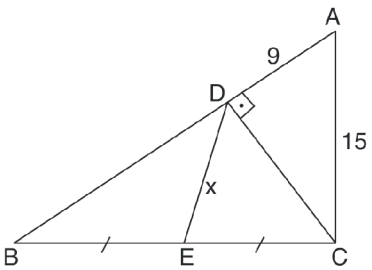

B noktası $\widehat{ABC}$'nin diklik merkezi

$|AB| = 5$ cm, $|BC| = 10$ cm

**Yukarıdaki verilere göre, $|BD| = x$ kaç cm'dir?**

A) $2\sqrt{5}$ B) $\sqrt{5}$ C) $\sqrt{3}$ D) $2\sqrt{3}$ E) $2\sqrt{2}$

**6**




C noktası $\widehat{ABC}$'nin diklik merkezi, $[CD] \perp [AB]$,

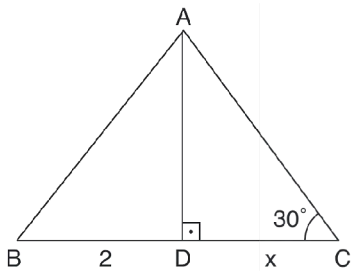
$|BE| = |EC|$, $|AD| = 9$ cm, $|AC| = 15$ cm

**Yukarıdaki verilere göre, $|DE| = x$ kaç cm'dir?**

A) 15 B) 13 C) 12 D) 10 E) 8

COOLMATEMATİK

**7**



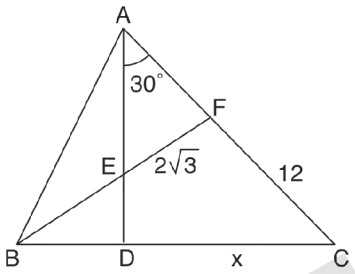

A noktası $\widehat{ABC}$'nin diklik merkezi,

$[AD] \perp [BC]$, $m(\widehat{ACB}) = 30^\circ$, $|BD| = 2$ cm

**Yukarıdaki verilere göre, $|DC| = x$ kaç cm'dir?**

A) 8 B) 6 C) 5 D) 4 E) 2

**8**



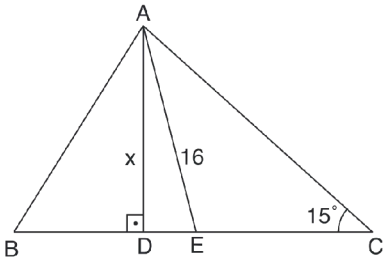

E, $\widehat{ABC}$'nin diklik merkezi, $m(\widehat{CAD}) = 30^\circ$

$|CF| = 12$ cm, $|EF| = 2\sqrt{3}$ cm

**Yukarıdaki verilere göre, $|CD| = x$ kaç cm'dir?**

A) 12 B) 11 C) 10 D) 9 E) 8

**9**



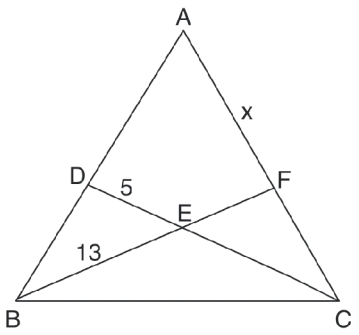

A noktası $\widehat{ABC}$'nin diklik merkezi, $m(\widehat{ACB}) = 15^\circ$,

$|BE| = |EC|$, $|AE| = 16$ cm

**Yukarıdaki verilere göre, $|AD| = x$ kaç cm'dir?**

A) 10 B) 9 C) 8 D) 6 E) 4

**10**



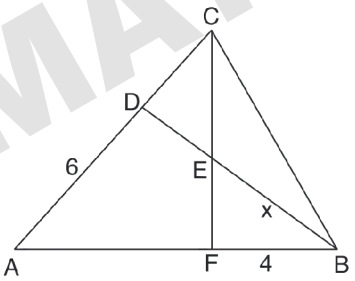

E noktası $\widehat{ABC}$'nin diklik merkezi,

$|AB| = |AC|$, $|DE| = 5$ cm, $|BE| = 13$ cm

**Yukarıdaki verilere göre, $|AF| = x$ kaç cm'dir?**

A) 15 B) $\frac{15}{2}$ C) 5 D) 4 E) 3

**11**



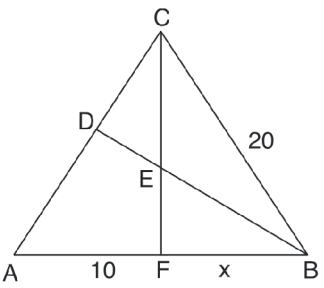

E noktası $\widehat{ABC}$'nin diklik merkezi,

$|AB| = |AC|$, $|AD| = 6$ cm, $|BF| = 4$ cm

**Yukarıdaki verilere göre, $|BE| = x$ kaç cm'dir?**

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

**12**




A noktası $\widehat{BEC}$'nin diklik merkezi,

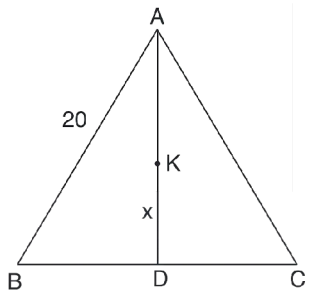
$|AB| = |AC|$, $|AF| = 10$ cm, $|BC| = 20$ cm

**Yukarıdaki verilere göre, $|BF| = x$ kaç cm'dir?**

A) 10 B) 9 C) 8 D) 7 E) 6

COOLMATEMATİK

**13**

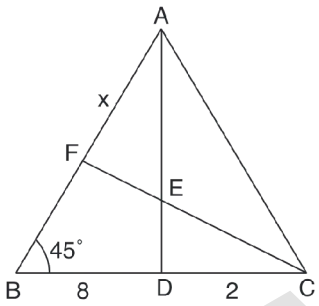



K noktası, ABC eşkenar üçgeninin diklik merkezi
$|AB| = 20$ cm dir.

**Yukarıdaki verilere göre, $|KD| = x$ kaç cm'dir?**

A) $5\sqrt{3}$ B) $3\sqrt{3}$ C) $\frac{10\sqrt{3}}{3}$ D) $\frac{5\sqrt{3}}{2}$ E) $\frac{5\sqrt{3}}{3}$

**14**

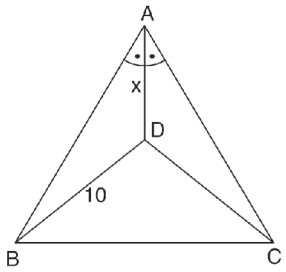



B noktası $\widehat{AEC}$'nin diklik merkezi,
$m(\widehat{ABC}) = 45^\circ$, $|BD| = 8$ cm, $|CD| = 2$ cm

**Yukarıdaki verilere göre, $|AF| = x$ kaç cm'dir?**

A) $5\sqrt{2}$ B) $4\sqrt{2}$ C) $3\sqrt{2}$ D) $2\sqrt{2}$ E) $\sqrt{2}$

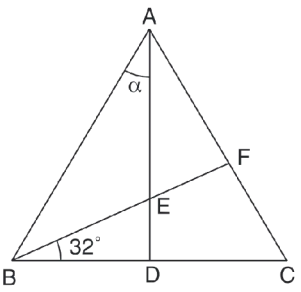
**15**




D noktası $\widehat{BDC}$'nin diklik merkezi ve $\widehat{ABC}$'nin ağırlık merkezidir. $m(\widehat{BAD}) = m(\widehat{CAD})$ ve $|BD| = 10$ cm **olduğuna göre, $|AD| = x$ kaç cm'dir?**

A) 20 B) $10\sqrt{2}$ C) 10 D) $5\sqrt{2}$ E) 5

**16**

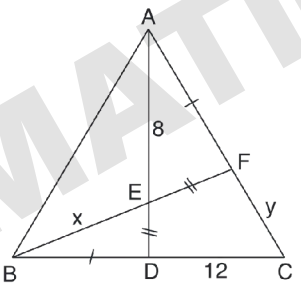



E noktası, $\widehat{ABC}$'nin diklik merkezi,
$|AB| = |AC|$, $m(\widehat{CBF}) = 32^\circ$

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

A) 16 B) 24 C) 32 D) 40 E) 64

**17**

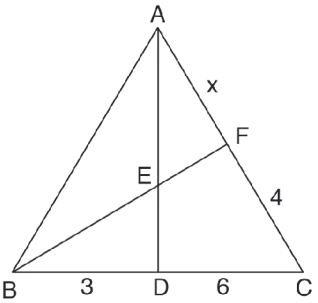



ABC üçgen, E diklik merkezi,
$|AF| = |BDI$, $|DE| = |EF|$, $|AE| = 8$ cm,
$|DC| = 12$ cm

**Yukarıdaki verilere göre x + y toplamı kaç cm'dir?**

A) 40 B) 30 C) 20 D) 18 E) 15

**18**




C noktası $\widehat{ABE}$'nin diklik merkezi,
$|BD| = 3$ cm, $|DC| = 6$ cm, $|CF| = 4$ cm

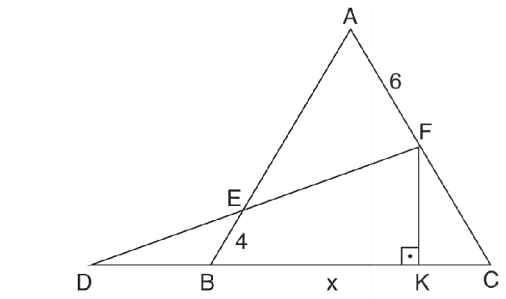
**Yukarıdaki verilere göre, $|AF| = x$ kaç cm'dir?**

A) $\frac{15}{2}$ B) 8 C) $\frac{17}{2}$ D) 9 E) $\frac{19}{2}$

COOLMATEMATİK

Cool Yayınları

**19**




ABC eşkenar üçgen

F noktası, $\widehat{CDF}$'nin diklik merkezi

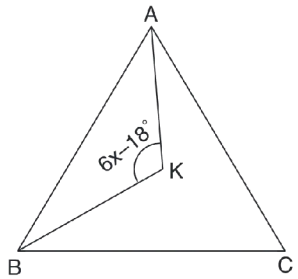
$[FK] \perp [CD]$, $|AF| = 6$ cm, $|BE| = 4$ cm

**Yukarıdaki verilere göre, $|BK| = x$ kaç cm'dir?**

A) 12 B) 11 C) 10 D) 9 E) 8

A

**20**



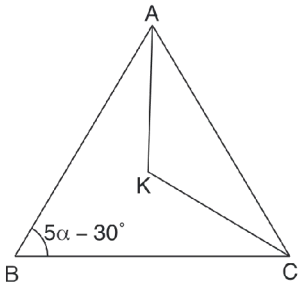

K noktası $\widehat{ABC}$'nin diklik merkezi

$m(\widehat{AKB}) = 6x - 18^\circ$

**Yukarıdaki verilere göre, x in alabileceği en büyük ve en küçük tam sayı değerleri toplamı kaç derecedir?**

A) 49 B) 50 C) 51 D) 52 E) 53

**21**



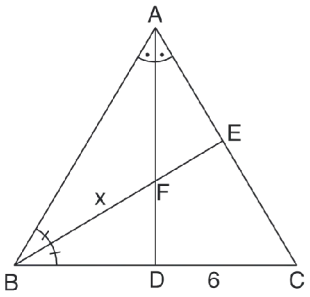

K noktası, $\widehat{ABC}$'nin diklik merkezi

$m(\widehat{ABC}) = 5\alpha - 30^\circ$

**Yukarıdaki verilere göre, $\alpha$ nın alabileceği en büyük tam sayı değeri kaç derecedir?**

A) 24 B) 23 C) 22 D) 21 E) 20

**22**



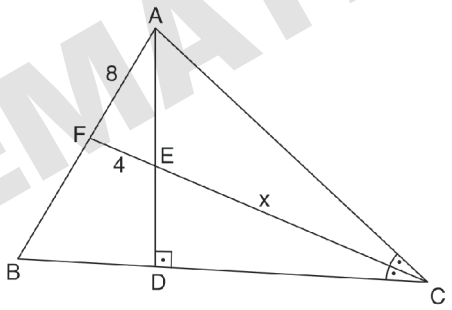

F noktası $\widehat{ABC}$'nin diklik merkezi

[AD] ve [BE] açıortaylar, $|DC| = 6$ cm, $|BF| = x$ cm

**Yukarıdaki verilere göre, $|BF| = x$ kaç cm'dir?**

A) $\sqrt{3}$ B) $2\sqrt{3}$ C) 6 D) $4\sqrt{3}$ E) 8

**23**



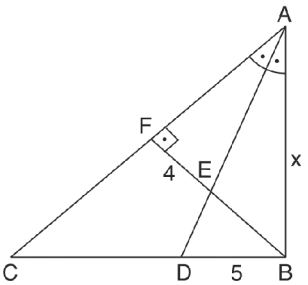

A noktası, $\widehat{ABC}$'nin diklik merkezi

[CF] açıortay, $[AD] \perp [BC]$, $|AF| = 8$ cm, $|EF| = 4$ cm

**Yukarıdaki verilere göre, $|CE| = x$ kaç cm'dir?**

A) 20 B) 24 C) 26 D) 28 E) 30

**24**




B noktası $\widehat{ABC}$'nin diklik merkezi,

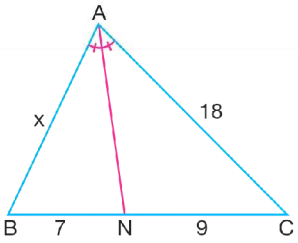
[AD] açıortay, $[BF] \perp [AC]$, $|EF| = 4$ cm, $|BD| = 5$ cm

**Yukarıdaki verilere göre, $|AB| = x$ kaç cm'dir?**

A) 10 B) 12 C) 13 D) 14 E) 15

COOLMATEMATİK

**25**

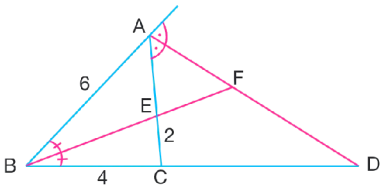



ABC bir üçgen
[AN] açıortay
|BN| = 7 cm
|NC| = 9 cm
|AC| = 18 cm

**Yukarıdaki verilere göre, |AB| = x kaç cm dir?**

A) 14 B) 13 C) 12 D) 11 E) 10

**26**

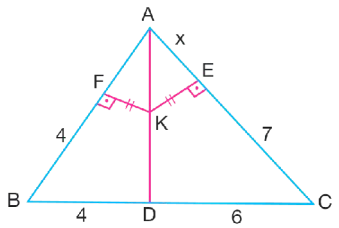



[BF] ve [AD] açıortay
|AD| = 6 cm
|BC| = 4 cm
|EC| = 2 cm

**Yukarıdaki verilere göre, $\frac{|AF|}{|AD|}$ oranı kaçtır?**

A) $\frac{1}{5}$ B) $\frac{1}{4}$ C) $\frac{1}{3}$ D) $\frac{2}{3}$ E) $\frac{3}{4}$

**27**

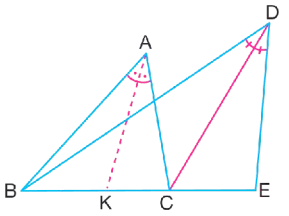



[KE] ⊥ [AC]
[KF] ⊥ [AB]
|KE| = |KF|
|BF| = |BD| = 4 cm
|DC| = 6 cm
|EC| = 7 cm

**Yukarıdaki verilere göre, |AE| = x kaç cm dir?**

A) 1 B) 1,5 C) 2 D) 2,5 E) 3

**28**

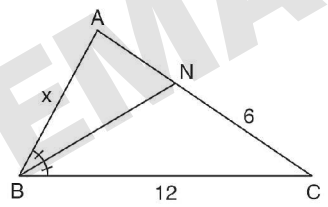



|AB| = 3 br
|AC| = 5 br
|BD| = 8 br
|DE| = 7 br

**ABC ve DBE üçgenlerinde [AK] ile [DC] açıortaylar olduğuna göre, $\frac{|BK|}{|CE|}$ oranı kaçtır?**

A) $\frac{3}{7}$ B) $\frac{5}{7}$ C) 1 D) $\frac{8}{7}$ E) $\frac{12}{7}$

**29**

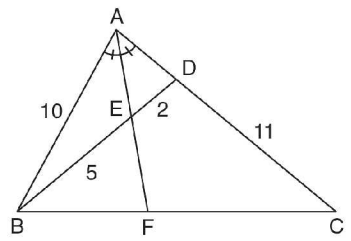



ABC bir üçgen
[BN] açıortay
|BC| = 12 cm
|NC| = 6 cm

**Çevre(ABC) = 27 cm olduğuna göre, |AB| = x kaç cm dir?**

A) 4 B) 6 C) 7,5 D) 8 E) 9

**30**



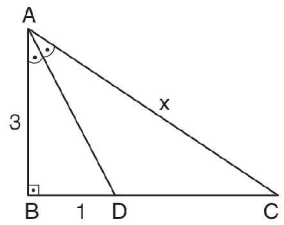

ABC bir üçgen
[AF] açıortay
B, E, D doğrusal
|AB| = 10 cm
|BE| = 5 cm
|ED| = 2 cm
|DC| = 11 cm

**Yukarıdaki verilere göre, $\frac{|BF|}{|FC|}$ oranı kaçtır?**

A) $\frac{2}{3}$ B) $\frac{3}{5}$ C) $\frac{4}{7}$ D) $\frac{5}{9}$ E) $\frac{6}{11}$

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**31**




[AD] açıortay

[AB] ⊥ [BC]

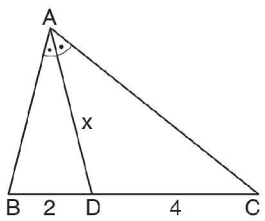
|AB| = 3 br

|BD| = 1 br

**Yukarıdaki verilere göre, |AC| = x kaç birimdir?**

A) $\frac{9}{4}$ B) $\frac{11}{4}$ C) $\frac{13}{4}$ D) $\frac{15}{4}$ E) $\frac{17}{4}$

**32**




[AD] açıortay

|BD| = 2 br

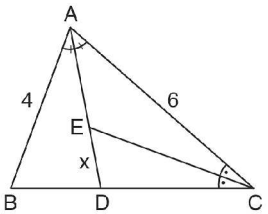
|DC| = 4 br

Çevre(ABC) = 18 br

**Yukarıdaki verilere göre, |AD| = x kaç birimdir?**

A) $2\sqrt{2}$ B) $2\sqrt{3}$ C) $2\sqrt{5}$ D) $2\sqrt{6}$ E) $2\sqrt{7}$

**33**




[AD] ve [EC] açıortay

|AB| = 4 br

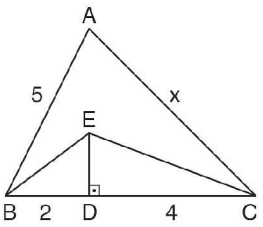
|AC| = 6 br

|BC| = 5 br

**Yukarıdaki verilere göre, |ED| = x kaç birimdir?**

A) $\sqrt{2}$ B) $\sqrt{3}$ C) $\sqrt{5}$ D) $\sqrt{6}$ E) $\sqrt{10}$

**34**




E, iç teğet çemberin merkezi

[ED] ⊥ [BC]

|AB| = 5 br

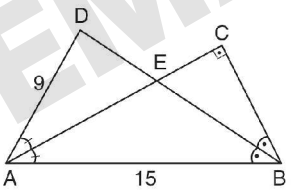
|BD| = 2 br

|DC| = 4 br

**Yukarıdaki verilere göre, |AC| = x kaç birimdir?**

A) 6 B) 7 C) 8 D) 9 E) 10

**35**




[AC] ⊥ [BC]

[AC] : $\widehat{DAB}$ nın açıortayı

[BD] : $\widehat{ABC}$ nın açıortayı

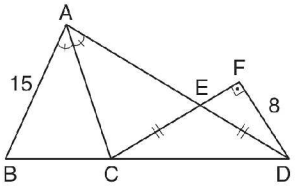
|AD| = 9 br

|AB| = 15 br

**Yukarıdaki verilere göre, |AC| kaç br dir?**

A) $6\sqrt{2}$ B) $7\sqrt{2}$ C) $8\sqrt{2}$ D) $9\sqrt{2}$ E) $10\sqrt{2}$

**36**




ABD bir üçgen

[AC] açıortay

[CF] ⊥ [DF]

|FD| = 8 br

|AB| = 15 br

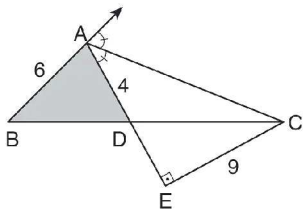
|CE| = |ED|

**Yukarıdaki verilere göre, Alan(ABC) kaç $br^2$ dir?**

A) 36 B) 48 C) 50 D) 60 E) 72

COOLMATEMATİK

**37**




ABC ve AEC birer üçgen

[AC] açıortay

AE ⊥ EC

|AB| = 6 br

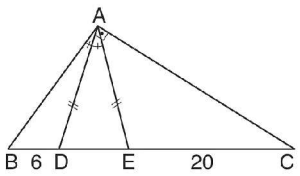
|AD| = 4 br

|EC| = 9 br

**Yukarıdaki verilere göre, Alan(ABD) kaç br$^2$ dir?**

A) 6 B) 8 C) 9 D) 10 E) 12

**38**




ABC bir üçgen

[AD] : $\widehat{BAE}$ nın açıortayı

[DA] ⊥ [AC]

|AD| = |AE|

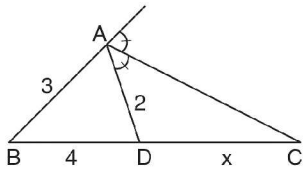
|BD| = 6 br

|EC| = 20 br

**Yukarıdaki verilere göre, |AB| kaç br dir?**

A) 8 B) 10 C) $6\sqrt{3}$ D) $5\sqrt{5}$ E) $8\sqrt{2}$

**39**




ABC bir üçgen

[AC] açıortay

|AD| = 2 br

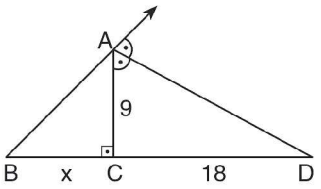
|AB| = 3 br

|BD| = 4 br

**Yukarıdaki verilere göre, |DC| = x kaç birimdir?**

A) 4 B) 5 C) 6 D) 7 E) 8

**40**




ABD bir üçgen

[AD] açıortay

[AC] ⊥ [BD]

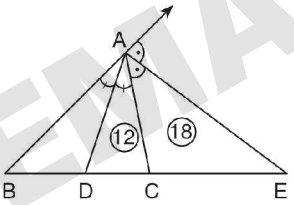
|AC| = 9 br

|CD| = 18 br

**Yukarıdaki verilere göre, |BC| = x kaç br dir?**

A) 6 B) 8 C) 10 D) 12 E) 15

**41**




ABE bir üçgen

[AD] ve [AE] açıortay

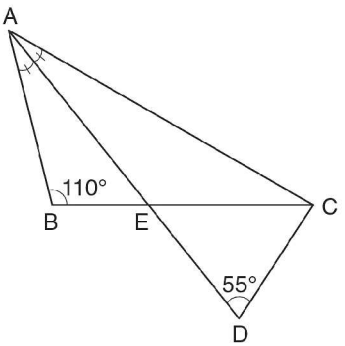
Alan(ADC) = 12 br$^2$

Alan(ACE) = 18 br$^2$

**Yukarıdaki verilere göre, Alan(ABD) kaç br$^2$ dir?**

A) 60 B) 56 C) 48 D) 42 E) 36

**42**




ABC bir üçgen

[AD] açıortay

m($\widehat{ABC}$) = 110°

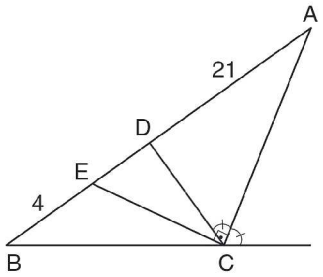
m($\widehat{ADC}$) = 55°

**$\frac{|AB|}{|BE|} = 2$ olduğuna göre, $\frac{|AE|}{|ED|}$ oranı kaçtır?**

A) $\frac{5}{4}$ B) $\frac{4}{3}$ C) $\frac{3}{2}$ D) 1 E) $\frac{2}{3}$

COOLMATEMATİK

**43**




ABC bir üçgen

[AC] açıortay

[EC] ⊥ [AC]

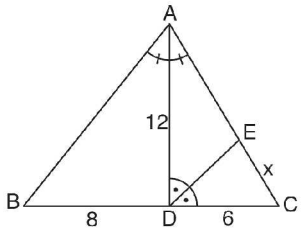
|AD| = 21 br

|BE| = 4 br

**Yukarıdaki verilere göre, $\frac{|BC|}{|DC|}$ oranı kaçtır?**

A) $\frac{3}{2}$ B) $\frac{4}{3}$ C) $\frac{5}{4}$ D) $\frac{6}{5}$ E) $\frac{7}{6}$

**44**




ABC bir üçgen

[AD] ve [ED] açıortay

|AD| = 12 cm

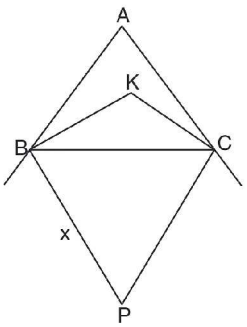
|DC| = 6 cm

|BD| = 8 cm

**Yukarıdaki verilere göre, |EC| = x kaç cm dir?**

A) 3 B) 4 C) 5 D) 6 E) 8

**45**




K, ABC üçgenin iç teğet çemberenin P ise dış teğet çemberinin merkezidir.

|KC| = 7 cm

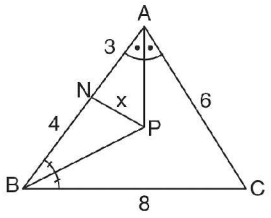
|CP| = 24 cm

|KB| = 15 cm

**Yukarıdaki verilere göre, |BP| = x kaç cm dir?**

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

**46**




ABC bir üçgen

[AP] ve [BP] açıortay

|BC| = 8 cm

|AC| = 6 cm

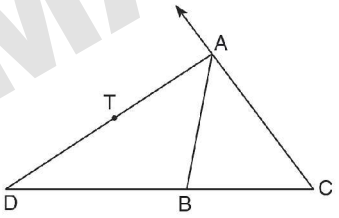
|AN| = 3 cm

|BN| = 4 cm

**Yukarıdaki verilere göre, |NP| = x kaç cm dir?**

A) 1 B) 2 C) 3 D) 4 E) 5

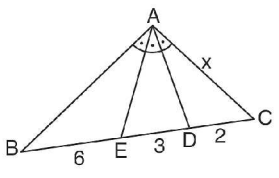
**47**




**T, ABC üçgeninin dış teğet çemberinin merkezi, ve |DB| · |AC| = 18 cm$^2$ olduğuna göre, |AB| · |DC| kaç cm$^2$ dir?**

A) 6 B) 9 C) 12 D) 18 E) 36

**48**




ABC bir üçgen

m(BÂE) = m(EÂD) = m(DÂC)

|BE| = 6 cm

|ED| = 3 cm

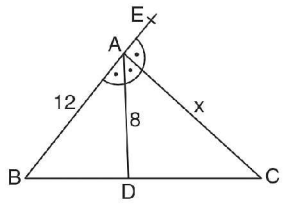
|DC| = 2 cm

**olduğuna göre, |AC| = x kaç cm dir?**

A) 4 B) $2\sqrt{5}$ C) $2\sqrt{7}$ D) 6 E) $2\sqrt{10}$

COOLMATEMATİK

**49**




ABC bir üçgen

$m(\widehat{EAC}) = m(\widehat{DAC}) = m(\widehat{BAD})$

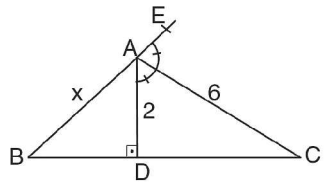
$|AD| = 8$ cm

$|AB| = 12$ cm

**olduğuna göre, $|AC| = x$ kaç cm dir?**

A) 16 B) 18 C) 20 D) 22 E) 24

**50**




ABC bir üçgen

$[AD] \perp [BC]$

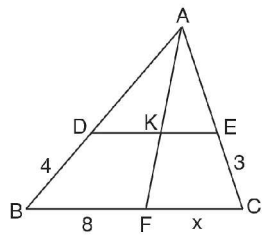
$|AD| = 2$ cm

$|AC| = 6$ cm

**olduğuna göre, $|AB| = x$ kaç cm dir?**

A) $\frac{18}{7}$ B) $\frac{23}{7}$ C) $\frac{7\sqrt{3}}{2}$ D) $\frac{6\sqrt{7}}{7}$ E) $\sqrt{5}$

**51**




K, ABC üçgeninin iç teğet çemberinin merkezi

$[DE] // [BC]$

$|DB| = 4$ cm

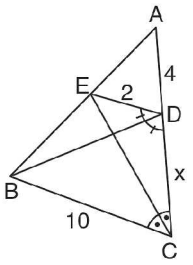
$|EC| = 3$ cm

$|BF| = 8$ cm

**olduğuna göre, $|FC| = x$ kaç cm dir?**

A) 4 B) 5 C) 6 D) 8 E) 9

**52**




ABC bir üçgen

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

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

$|AD| = 4$ cm

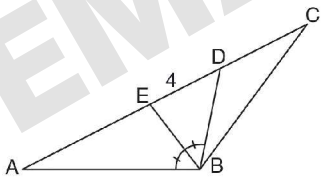
$|ED| = 2$ cm

$|BC| = 10$ cm

**Yukarıdaki verilere göre, $|DC| = x$ kaç cm dir?**

A) 2 B) 4 C) 6 D) 8 E) 10

**53**



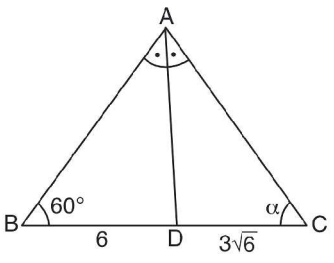

$|ED| = 4$ cm

$|DC| + |ED| = |AE|$

**$m(\widehat{BAC}) + m(\widehat{BCA}) = m(\widehat{DBC})$ olduğuna göre, $|AC|$ kaç cm dir?**

A) 16 B) 20 C) 24 D) 28 E) 32

**54**




ABC bir üçgen

[AD] açıortay

$m(\widehat{ACB}) < 90$

$m(\widehat{ABC}) = 60°$

$|BD| = 6$ cm

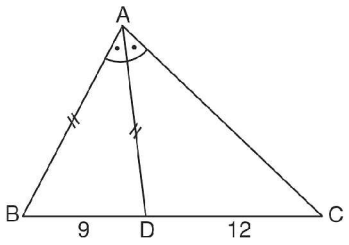
$|DC| = 3\sqrt{6}$ cm

**olduğuna göre, $m(\widehat{ACD}) = \alpha$ kaç derecedir?**

A) 15 B) 30 C) 45 D) 60 E) 75

COOLMATEMATİK

**55**




ABC bir üçgen

[AD] açıortay

$|AB| = |AD|$

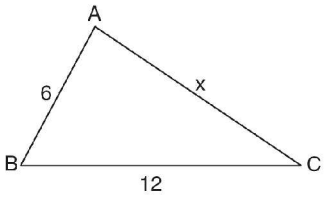
$|BD| = 9$ cm

$|DC| = 12$ cm

**olduğuna göre, Çevre(ABC) kaç cm dir?**

A) 63 B) 60 C) 57 D) 54 E) 51

**56**




ABC bir üçgen

$m(\widehat{ABC}) = 2\,m(\widehat{ACB})$

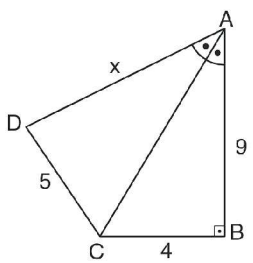
$|AB| = 6$ cm

$|BC| = 12$ cm

**Yukarıdaki verilere göre, $|AC| = x$ kaç cm dir?**

A) 6 B) $6\sqrt{2}$ C) $4\sqrt{5}$ D) $6\sqrt{3}$ E) 12

**57**




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

$[AB] \perp [BC]$

$|AB| = 9$ cm

$|CB| = 4$ cm

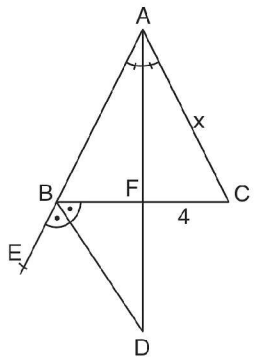
$|DC| = 5$ cm

$m(\widehat{ADC}) < 90°$

**Yukarıdaki verilere göre, $|AD| = x$ kaç cm dir?**

A) 18 B) 16 C) 14 D) 12 E) 10

**58**




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

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

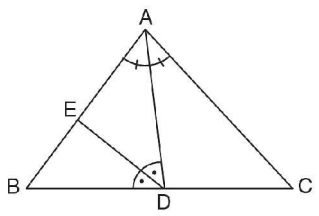
$5|FD| = 2|AF|$

$|FC| = 4$ cm

**Yukarıdaki verilere göre, $|AC| = x$ kaç cm dir?**

A) 16 B) 14 C) 12 D) 10 E) 8

**59**




ABC bir üçgen

[AD] ve [ED] açıortay

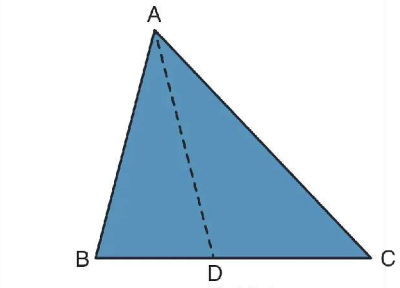
$8|AE| = 8|EB| = 3|AC|$

**Yukarıdaki verilere göre, $\frac{|AC|}{|DC|}$ oranı kaçtır?**

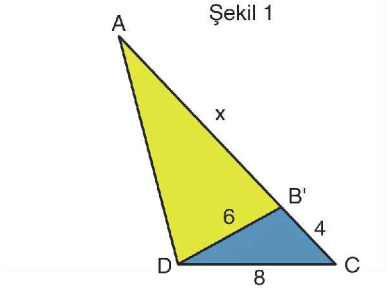
A) $\frac{5}{2}$ B) 2 C) $\frac{3}{2}$ D) $\frac{\sqrt{7}}{2}$ E) $\frac{\sqrt{5}}{2}$

COOLMATEMATİK

**60** Şekil 1'de verilen ön yüzü mavi arka yüzü sarı renkteki ABC üçgeni şeklindeki kağıt B köşesinden [AD] boyunca katlanınca B noktası Şekil 2'deki gibi [AC] üzerindeki B' noktası ile çakışıyor.



Şekil 1



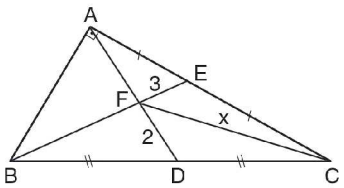
Şekil 2

|DB'| = 6 birim, |CB'| = 4 birim ve |DC| = 8 birimdir.

**Buna göre |AB'| = x kaç birimdir?**

A) 8 B) 9 C) 10 D) 11 E) 12

**61**




BAC dik üçgen

|AE| = |EC|

|BD| = |DC|

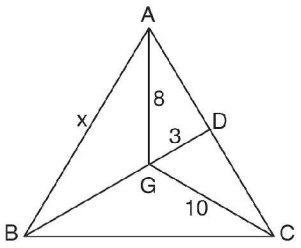
|FD| = 2 br

|FE| = 3 br

**Yukarıdaki verilere göre, |FC| = x kaç br dir?**

A) $3\sqrt{10}$ B) $4\sqrt{5}$ C) $6\sqrt{2}$ D) $5\sqrt{3}$ E) $2\sqrt{11}$

**62**




ABC bir üçgen

G ağırlık merkezi

|AG| = 8 cm

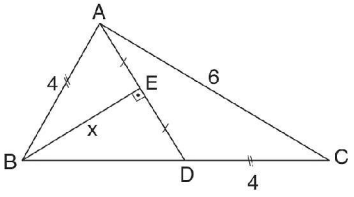
|GD| = 3 cm

|GC| = 10 cm

**Yukarıdaki verilere göre, |AB| = x kaç cm dir?**

A) 9 B) 10 C) 11 D) 12 E) 13

**63**




ABC bir üçgen

[AD] ⊥ [BE]

|AE| = |ED|

|AB| = |DC| = 4 br

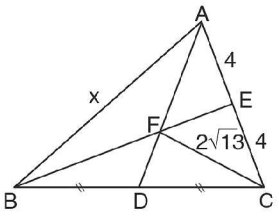
|AC| = 6 br

**Yukarıdaki verilere göre, |BE| = x kaç birimdir?**

A) $\frac{3\sqrt{3}}{2}$ B) 2 C) $\frac{3\sqrt{6}}{2}$ D) $3\sqrt{3}$ E) 3

COOLMATEMATİK

**64**




ABC bir üçgen

$|AE| = |EC| = 4$ br

$|BD| = |DC|$

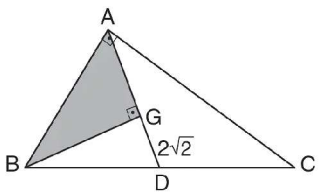
$|FC| = 2\sqrt{13}$ br

$|BE| = 2|AD|$

**Yukarıdaki verilere göre, $|AB| = x$ kaç br dir?**

A) $2\sqrt{37}$ B) $3\sqrt{10}$ C) $6\sqrt{3}$ D) $4\sqrt{6}$ E) $4\sqrt{5}$

**65**




ABC dik üçgen

$[AB] \perp [AC]$

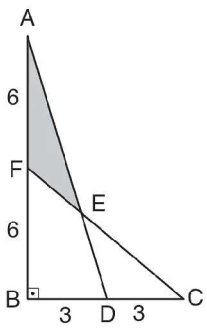
$[BG] \perp [AD]$

$|GD| = 2\sqrt{2}$ cm

**olduğuna göre, Alan(AGB) kaç $cm^2$ dir?**

A) $14\sqrt{2}$ B) $16\sqrt{2}$ C) $18\sqrt{2}$ D) $20\sqrt{2}$ E) $24\sqrt{2}$

**66**




$[AB] \perp [BC]$

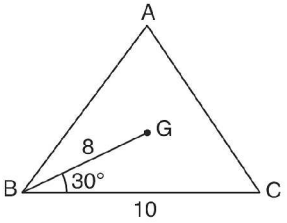
$|AF| = |FB| = 6$ cm

$|BD| = |DC| = 3$ cm

**olduğuna göre, Alan(AFE) kaç $cm^2$ dir?**

A) 3 B) 6 C) 9 D) 12 E) 15

**67**




ABC bir üçgen

G ağırlık merkezi

$m(\widehat{GBC}) = 30°$

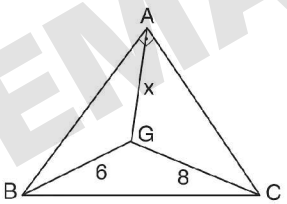
$|BG| = 8$ cm

$|BC| = 10$ cm

**olduğuna göre, Alan(ABC) kaç $cm^2$ dir?**

A) 48 B) 54 C) 60 D) 66 E) 72

**68**




ABC dik üçgen

$[AB] \perp [AC]$

G ağırlık merkezi

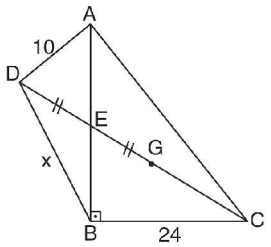
$|BG| = 6$ cm

$|GC| = 8$ cm

**olduğuna göre, $|AG| = x$ kaç cm dir?**

A) $\sqrt{5}$ B) $2\sqrt{2}$ C) $\sqrt{10}$ D) $2\sqrt{5}$ E) $2\sqrt{6}$

**69**




ABC dik üçgen

$[AB] \perp [BC]$

G, ABC üçgeninin ağırlık merkezi

$|AD| = 10$ cm

$|BC| = 24$ cm

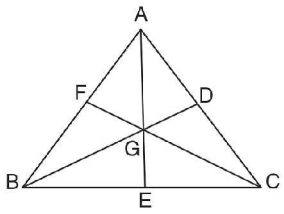
$|DE| = |EG|$

**Yukarıdaki verilere göre, $|AB| = x$ kaç cm dir?**

A) 12 B) 16 C) 18 D) 24 E) 32

COOLMATEMATİK

**70**




G, ABC üçgeninin ağırlık merkezi

$|AE| = 9$ cm

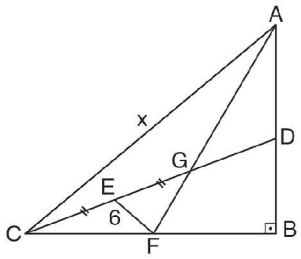
$|FC| = 15$ cm

$|BD| = 12$ cm

**Yukarıdaki verilere göre, $m(\widehat{AGB})$ kaç derecedir?**

A) 15 B) 45 C) 60 D) 75 E) 90

**71**




ABC dik üçgen

$[AB] \perp [BC]$

G ağırlık merkezi

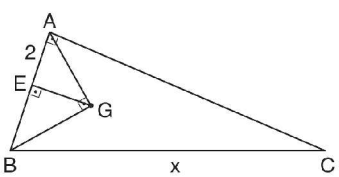
$|CE| = |EG|$

$|EF| = 6$ cm

**olduğuna göre, $|AC| = x$ kaç cm dir?**

A) 60 B) 54 C) 48 D) 42 E) 36

**72**




BAC dik üçgen

G : ağırlık merkezi

$[AG] \perp [BG]$

$[GE] \perp [AB]$

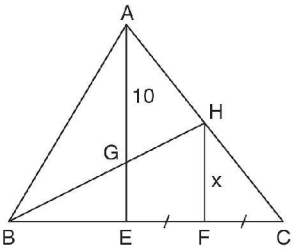
$|AE| = 2$ br

**Yukarıdaki verilere göre, $|BC| = x$ kaç br dir?**

A) $8\sqrt{3}$ B) $6\sqrt{3}$ C) 10

D) $4\sqrt{5}$ E) $6\sqrt{2}$

**73**




ABC bir üçgen

G, ABC üçgenin ağırlık merkezi

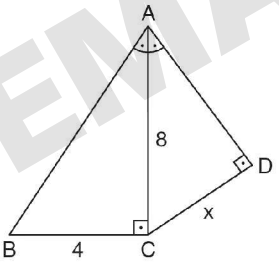
$|EF| = |FC|$

$|AG| = 10$ br

**Yukarıdaki verilere göre, $|FH| = x$ kaç br olur?**

A) 6,5 B) 7 C) 7,5 D) 8 E) 8,5

**74**




$[AC] \perp [BC]$

$[CD] \perp [AD]$

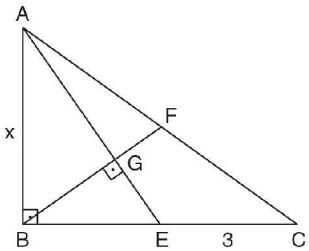
$[AC]$ açıortay

$|AC| = 2|BC| = 8$ br

**Yukarıdaki verilere göre, $|CD| = x$ kaç br dir?**

A) $\frac{7}{\sqrt{5}}$ B) $\frac{8}{\sqrt{5}}$ C) $\frac{9}{\sqrt{5}}$ D) $2\sqrt{5}$ E) $\frac{11}{\sqrt{5}}$

**75**




ABC dik üçgen

G, ABC üçgenin ağırlık merkezi

$[BG] \perp [AE]$

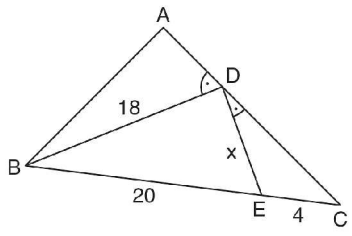
$|EC| = 3$ br

**Yukarıdaki verilere göre, $|AB| = x$ kaç br dir?**

A) $\sqrt{2}$ B) $2\sqrt{2}$ C) $3\sqrt{2}$ D) $4\sqrt{2}$ E) $5\sqrt{2}$

COOLMATEMATİK

**76**

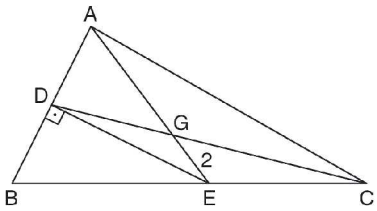



ABC bir üçgen
$m(\widehat{ADB}) = m(\widehat{CDE})$
A, D, C noktaları doğrusal
$|EC| = 4$ br
$|BD| = 18$ br
$|BE| = 20$ br

**Yukarıdaki verilere göre, $|ED| = x$ kaç br dir?**

A) 3 B) 4 C) 5 D) 6 E) 7

**77**

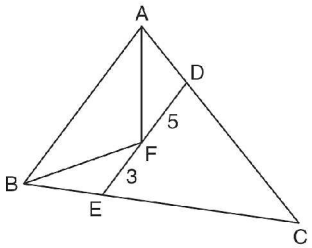



ABC bir üçgen
G, ABC üçgenin ağırlık merkezi
$[ED] \perp [AB]$
$|GE| = 2$ br

**Yukarıdaki verilere göre, $|BC|$ kaç br dir?**

A) 4 B) 6 C) 8 D) 10 E) 12

**78**

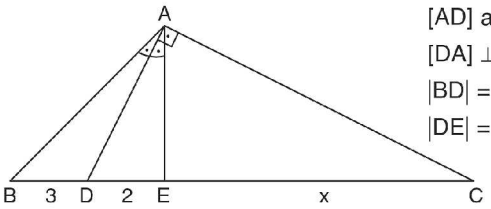



ABC bir üçgen
F, ABC üçgenin iç açıortayların kesim noktası
$[DE] \,//\, [AB]$
$|EC| - |DC| = 3$ br
$|EF| = 3$ br
$|DF| = 5$ br

**Yukarıdaki verilere göre, $|BC| - |AC|$ farkı kaç br olur?**

A) 1 B) 2 C) 3 D) 4 E) 5

**79**

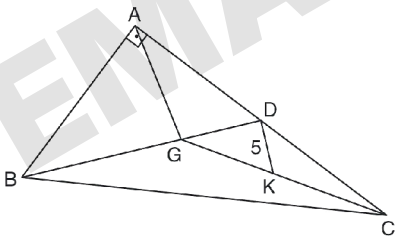



ABC bir üçgen
[AD] açıortay
$[DA] \perp [AC]$
$|BD| = 3$ br
$|DE| = 2$ br

**Yukarıdaki verilere göre, $|EC| = x$ kaç br dir?**

A) 7 B) 8 C) 9 D) 10 E) 11

**80**

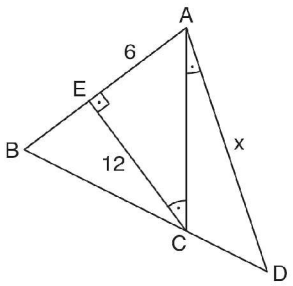



ABC dik üçgen
G, ABC üçgenin ağırlık merkezi
$[DK] \,//\, [AG]$
$|DK| = 5$ cm

**Yukarıdaki verilere göre, $|BC|$ kaç cm dir?**

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

**81**



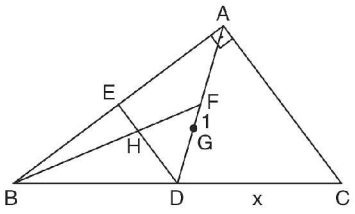

ABD bir üçgen
$[CE] \perp [AB]$
$|AB| = |BC|$
$m(\widehat{ECA}) = m(\widehat{CAD})$
$|EA| = 6$ br
$|CE| = 12$ br

**Yukarıdaki verilere göre, $|AD| = x$ kaç br dir?**

A) 15 B) 17 C) 20 D) 23 E) 25

COOLMATEMATİK

**82**




ABC dik üçgen

G, ABC üçgeninin ağırlık merkezi

[ED] // [AC]

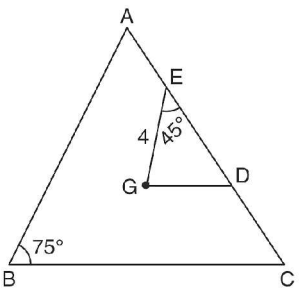
|BH| = 2|FH|

|FG| = 1 br

**Yukarıdaki verilere göre, |DC| = x kaç br dir?**

A) 2 B) 6 C) 10 D) 12 E) 18

**83**




ABC ikizkenar üçgen

G, ABC üçgenin ağırlık merkezi

|AC| = |BC|

$m(\widehat{ABC}) = 75°$

$m(\widehat{GEC}) = 45°$

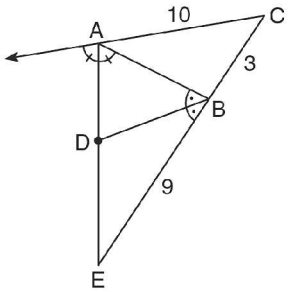
[GD] // [BC]

|GE| = 4 br

**Yukarıdaki verilere göre, |AD| kaç br dir?**

A) $4\sqrt{2}$ B) 5 C) $6\sqrt{2}$ D) 7 E) $8\sqrt{2}$

**84**




AEC bir üçgen

[DB] ve [AE] açıortay

|AC| = 10 br

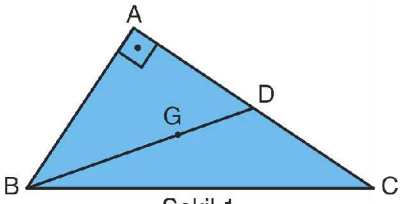
|BC| = 3 br

|EB| = 9 br

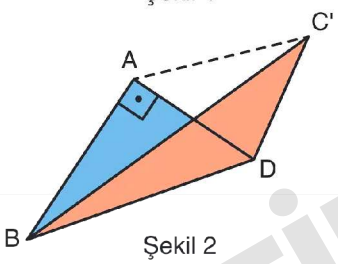
**Yukarıdaki verilere göre, $\frac{|AD|}{|DE|}$ oranı kaçtır?**

A) $\frac{1}{3}$ B) $\frac{9}{10}$ C) $\frac{5}{6}$ D) $\frac{13}{12}$ E) $\frac{11}{5}$

**85** Şekil 1'de ön yüzü mavi arka yüzü turuncu olan ABC dik üçgeninin ağırlık merkezi G noktasıdır. Verilen bu üçgen [BD] boyunca katlandığında C noktası Şekil 2'deki gibi C' noktasıyla çakışmaktadır.




Şekil 1



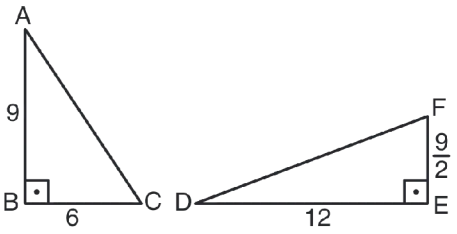

Şekil 2

[BA] ⊥ [AC], |AB| = 8 birim ve |AC| = 12 birimdir.

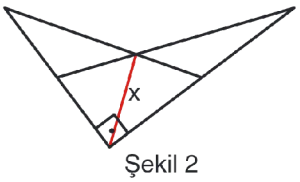
**Buna göre |AC'| kaç birimdir?**

A) 6 B) $\frac{36}{5}$ C) 12 D) $\frac{66}{5}$ E) 18

**86** Şekil 1'de kenar uzunlukları |AB| = 9 birim, |BC| = 6 birim, |DE| = 12 birim ve |EF| = $\frac{9}{2}$ birim olan ABC ve DEF dik üçgenleri verilmiştir.
[BA] ⊥ [BC] ve [DE] ⊥ [FE] dir. Bu iki üçgen dik köşeleri ve dik kenarları çakışacak şekilde üst üste yerleştirildiğinde Şekil 2 elde ediliyor.




Şekil 1



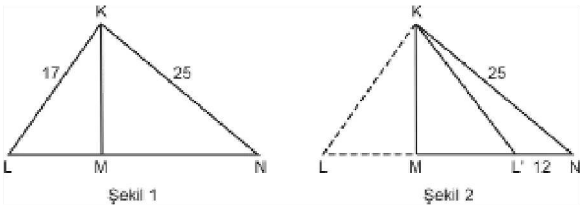

Şekil 2

**Buna göre Şekil 2'de x ile gösterilen uzunluk kaç birimdir?**

A) 4 B) 5 C) 6 D) 8 E) 10

COOLMATEMATİK

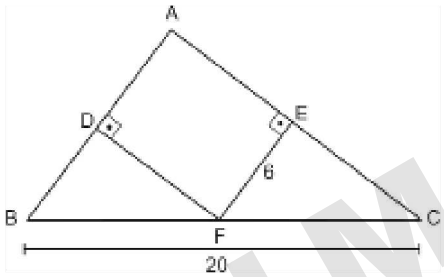
**87** Şekil 1 deki üçgen biçimindeki KLN kağıdı [KM] boyunca katlandığında Şekil 2 elde ediliyor. |KL| = 17 cm, |KN| = 25 cm ve |L'N| = 12 cm dir.




**Buna göre, |LN| kaç santimetredir?**

A) 18 B) 24 C) 25 D) 28 E) 32

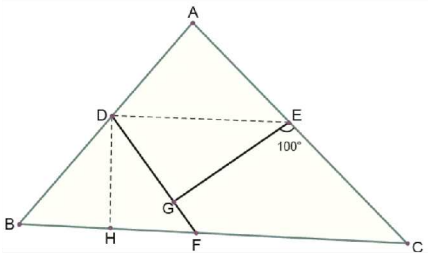
**88** Şekildeki ABC üçgeninde [DF] ve [EF] kenar orta dikmelerdir. F ∈ [BC], |EF| = 6 cm ve |BC| = 20 cm dir.




**Buna göre, |DF| kaç santimetredir?**

A) 4 B) 5 C) 7 D) 8 E) 9

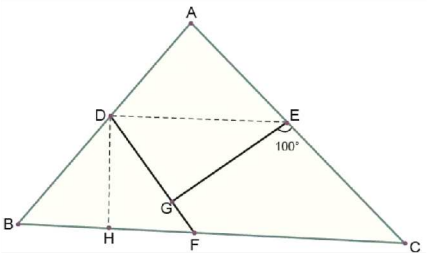
**89** Şekildeki ADE üçgeni [DE] boyunca katlandığında A noktası G ile çakışıyor. BDH üçgeni [DH] boyunca katlandığında B noktası ile F çakışıyor.




$m(\widehat{GEC}) = 100°$ **olduğuna göre** $m(\widehat{BCA})$ **kaç derecedir?**

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

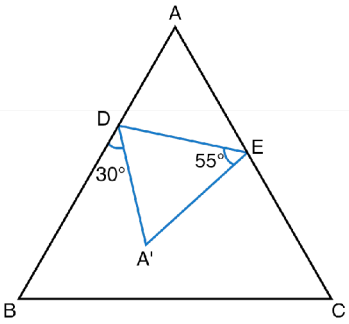
**90** Şekildeki ADE üçgeni [DE] boyunca katlandığında A noktası G ile çakışıyor. BDH üçgeni [DH] boyunca katlandığında B noktası ile F çakışıyor.




$m(\widehat{GEC}) = 100°$ **olduğuna göre** $m(\widehat{BCA})$ **kaç derecedir?**

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

**91** Aşağıda verilen ABC üçgeninde ADE üçgeni DE doğru parçası boyunca katlanarak A'DE üçgeni elde ediliyor.




|AB| = |AC|

$m(\widehat{BDA'}) = 30°$

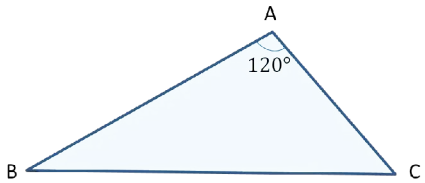
$m(\widehat{DEA'}) = 55°$

**Verilenlere göre** $m(\widehat{BCA})$ **kaç derecedir?**

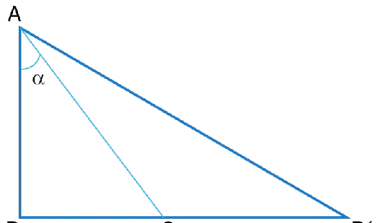
A) 50 B) 55 C) 60 D) 65 E) 70

COOLMATEMATİK

**92** Şekil 1'de ABC üçgeni verilmiştir. D ∈ [BC] olacak şekilde ABC üçgeni AD doğru parçası boyunca katlandığında Şekil 2'de gösterildiği gibi B köşesi BC üzerinde B' noktasına denk geliyor.



Şekil 1

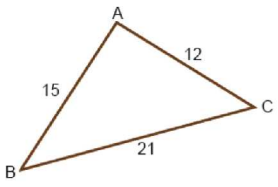


Şekil 2

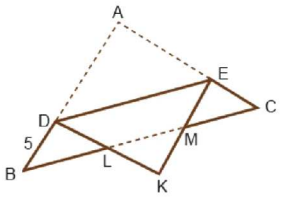
**|AC| = |B'C| olduğuna göre m(DAC) = α açısı kaç dercedir?**

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

**93** Şekil 1'deki gibi üçgen biçimindeki ABC kâğıdı [DE] // [BC] ve |BD| = 5 cm olacak biçimde Şekil 2'deki gibi [DE] boyunca katlanıyor. |AB| = 15 cm, |AC| = 12 cm ve |BC| = 21 cm'dir.



Şekil 1

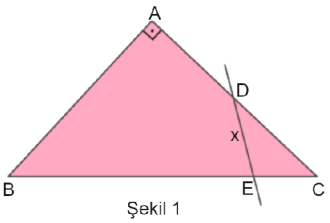


Şekil 2

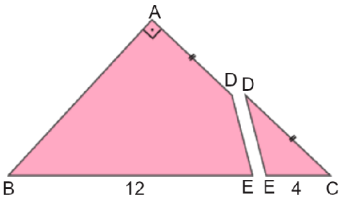
**L ve M noktaları [BC] üzerinde olduğuna göre KLM üçgeninin çevre uzunluğu kaç santimetredir?**

A) 12 B) 13 C) 14 D) 15 E) 16

**94**



Şekil 1



Şekil 2

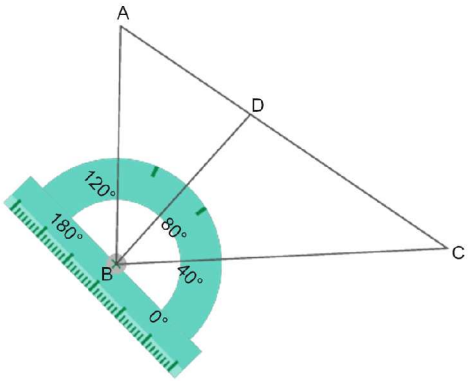
Elifnaz Şekil 1 deki gibi verilen kartonu DE doğrusu boyunca keserek 2 parçaya ayırıyor.

|AD| = |DC|, |BE| = 12 cm, |EC| = 4 cm ve AB ⊥ AC

**olduğuna göre, Elifnaz'ın kestiği kısmın |DE| = x in uzunluğu kaç cm dir?**

A) 4 B) 6 C) 8 D) 10 E) 12

**95**




Ölçü birimi derece olan bir iletkiye, ABC üçgeni şekildeki gibi yerleştirilmiştir.

3.|AB| = 2.|BC|

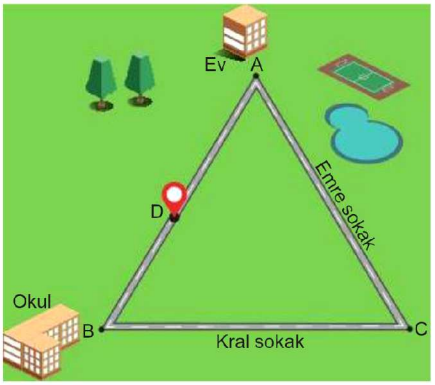
|AC| = 20 cm

**olduğuna göre, |AD| = x kaç cm dir?**

A) 4 B) 5 C) 6 D) 7 E) 8

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**96**



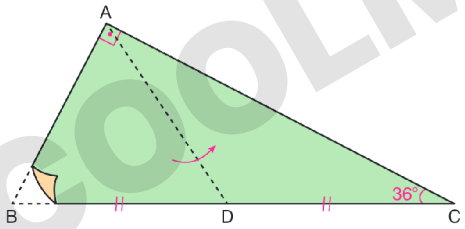

Okula gitmek için A noktasındaki evlerinden çıkan Can Emre Sokak ile Kral Sokak'a eşit uzaklıkta bulunan, AB yolu üzerindeki bir D noktasına gelince kitabını evde unuttuğunu hatırlıyor.

$|AC| = 1$ km, $|BC| = 1{,}5$ km, $|AB| = 1{,}2$ km

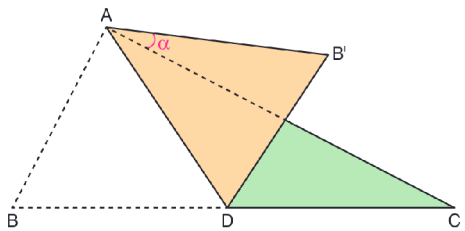
**Yukarıdaki verilere göre, Can'ın evi ile D noktası ile arasındaki uzaklık kaç metredir?**

A) 400 B) 420 C) 480 D) 520 E) 560

**97**




Şekil 1




Şekil 2

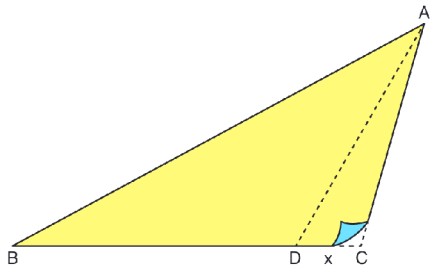
ABC dik üçgen, $[AB] \perp [AC]$, $|BD| = |DC|$, $m(\widehat{ACB}) = 36°$

Şekil 1'deki ABC dik üçgeni biçimindeki kâğıdın B köşesi [AD] boyunca katlandığında Şekil 2'deki B' noktasına geliyor.

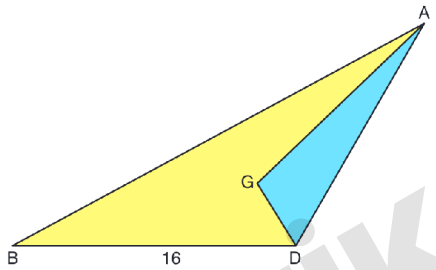
**Buna göre, $m(\widehat{CAB'}) = \alpha$ kaç derecedir?**

A) 12 B) 14 C) 15 D) 16 E) 18

**98**




Şekil 1




Şekil 2

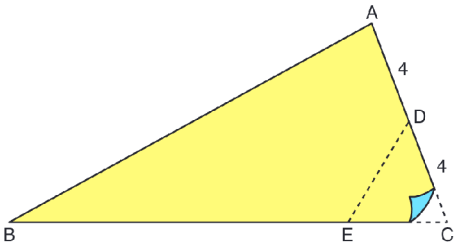
Şekil 1'deki ABC üçgeni biçimindeki kâğıdın C köşesi [AD] boyunca katlanınca C köşesi ABC üçgeninin ağırlık merkezi olan G noktasına şekil 2'deki gibi gelmektedir.

$|BD| = 16$ cm, $|DC| = x$

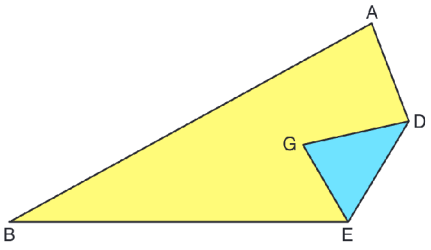
**Buna göre, x kaç cm dir?**

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

**99**




Şekil 1




Şekil 2

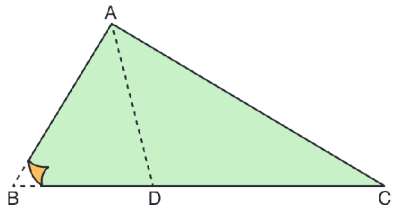
Şekil 1'deki ABC üçgeni biçimindeki kâğıdın C köşesi [DE] boyunca katlanınca C köşesi ABC üçgeninin ağırlık merkezi olan G noktasına Şekil 2'deki gibi gelmektedir.

**$|AB| = |BC|$ ve $|AD| = |DC| = 4$ cm olduğuna göre, Alan(ABC) kaç $cm^2$ dir?**

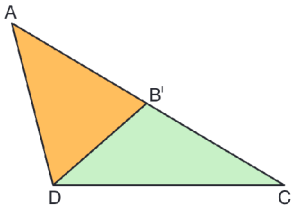
A) 42 B) 46 C) 48 D) 50 E) 52

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**100** ABC bir üçgen, $|BC| = 3|BD|$




Şekil 1



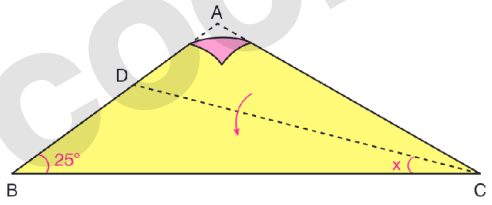

Şekil 2

Şekil 1'deki ABC üçgeni biçimindeki kâğıt [AD] boyunca katlandığında B köşesi [AC] üzerindeki B' noktasına Şekil 2'deki gibi gelmektedir.

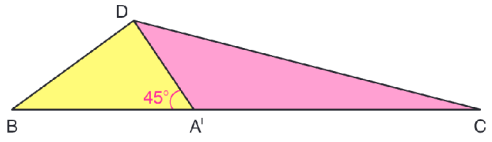
**Alan(ABC) = 45 cm² olduğuna göre, Şekil 2'deki yeşil boyalı bölgenin alanı kaç cm² dir?**

A) 10 B) 12 C) 15 D) 20 E) 25

**101**




Şekil 1




Şekil 2

ABC üçgeni biçimindeki kâğıt [CD] boyunca Şekil 1'deki gibi katlandığında A noktası [BC] üzerindeki A' noktasına Şekil 2'deki gibi gelmektedir.

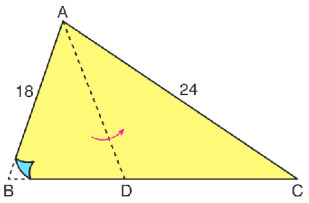
$m(\widehat{DBC}) = 25°$, $m(\widehat{DA'B}) = 45°$, $m(\widehat{DCB}) = x$

**Yukarıdaki verilere göre, x kaç derecedir?**

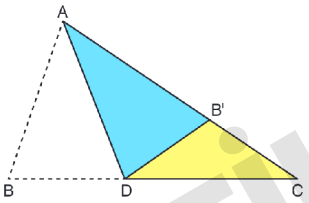
A) 5 B) 7,5 C) 10 D) 12,5 E) 15

**102** Şekil 1'deki ABC üçgeni biçimindeki kâğıdın ön yüzü sarı arka yüzü mavidir.

$|AB| = 18$ cm, $|AC| = 24$ cm




Şekil 1




Şekil 2

Şekil 1'deki ABC üçgeninin B köşesi [AD] boyunca katlandığında [AC] üzerindeki B' noktasına Şekil 2'deki gibi gelmektedir.

**D noktasının [AB]'ye uzaklığı 10 cm olduğuna göre, Şekil 2'deki sarı boyalı bölgenin alanı kaç cm² dir?**

A) 30 B) 32 C) 40 D) 42 E) 60

COOLMATEMATİK

# ÜÇGENLER

## CEVAP ANAHTARI

| No | Cevap | No | Cevap | No | Cevap |
|---|---|---|---|---|---|
| 1. | C | 35. | E | 69. | C |
| 2. | B | 36. | D | 70. | E |
| 3. | D | 37. | C | 71. | E |
| 4. | B | 38. | C | 72. | B |
| 5. | A | 39. | E | 73. | C |
| 6. | D | 40. | D | 74. | B |
| 7. | B | 41. | A | 75. | C |
| 8. | D | 42. | D | 76. | A |
| 9. | C | 43. | B | 77. | E |
| 10. | B | 44. | B | 78. | A |
| 11. | D | 45. | C | 79. | D |
| 12. | A | 46. | B | 80. | E |
| 13. | C | 47. | D | 81. | C |
| 14. | C | 48. | E | 82. | B |
| 15. | B | 49. | E | 83. | E |
| 16. | C | 50. | A | 84. | C |
| 17. | C | 51. | C | 85. | B |
| 18. | E | 52. | C | 86. | B |
| 19. | B | 53. | C | 87. | D |
| 20. | C | 54. | C | 88. | D |
| 21. | B | 55. | A | 89. | D |
| 22. | D | 56. | D | 90. | B |
| 23. | D | 57. | D | 91. | D |
| 24. | E | 58. | B | 92. | C |
| 25. | A | 59. | D | 93. | E |
| 26. | A | 60. | E | 94. | A |
| 27. | C | 61. | E | 95. | E |
| 28. | A | 62. | B | 96. | C |
| 29. | B | 63. | A | 97. | E |
| 30. | A | 64. | A | 98. | C |
| 31. | D | 65. | B | 99. | C |
| 32. | D | 66. | B | 100. | C |
| 33. | A | 67. | C | 101. | C |
| 34. | B | 68. | D | 102. | A |