coolmatematik

TYT/AYT GEOMETRİ

ÜÇGENLER

GENEL TEKRAR TESTİ 1

Adı ve Soyadı _____

Sınıfı / Şubesi _____

Öğrenci Numarası _____

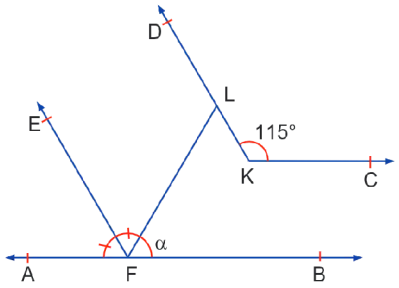
DERS ADI	SORU SAYISI	TOPLAM SORU	SÜRE (DK.)
TYT/AYT GEOMETRİ	130	**130**	**200**

ÖĞRENCİLERİN DİKKATİNE

1. DOĞRUDA AÇILAR
2. ÜÇGENDE AÇILAR
3. ÖZEL ÜÇGENLER
4. DİK ÜÇGEN
5. İKİZKENAR ÜÇGEN
6. EŞKENAR ÜÇGEN

DOĞRU	YANLIŞ	NET	PUAN

1



[KC // AB

[FE // [KD

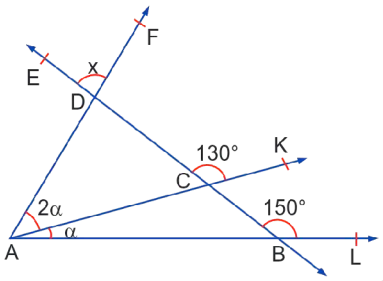
$m(\widehat{DKC}) = 115°$

Yukarıdaki şekilde [FE açıortaydır.

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

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

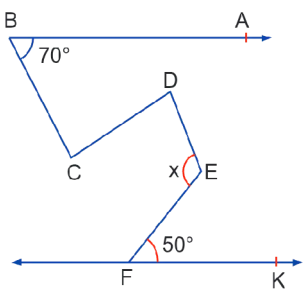
2



Yukarıdaki şekilde $m(\widehat{DAC}) = 2m(\widehat{BAC}) = 2\alpha$ $m(\widehat{DBL}) = 150°$, $m(\widehat{DCK}) = 130°$ olduğuna göre, $m(\widehat{EDF}) = x$ kaç derecedir?

A) 80 B) 90 C) 100 D) 115 E) 120

3



[BA // FK

[BC // [DE]

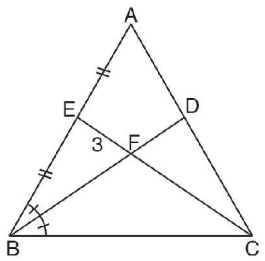
$m(\widehat{ABC}) = 70°$

$m(\widehat{EFK}) = 50°$

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

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

4



ABC eşkenar üçgen

[BD] açıortay

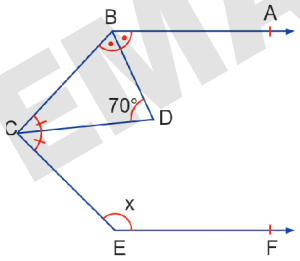
[CE] kenarortay

|EF| = 3 cm

Yukarıdaki verilere göre, ABC üçgeninin çevresi kaç cm dir?

A) $12\sqrt{3}$ B) $15\sqrt{3}$ C) $18\sqrt{3}$ D) $21\sqrt{3}$ E) $24\sqrt{3}$

5



Yandaki şekilde,

[BA // [EF

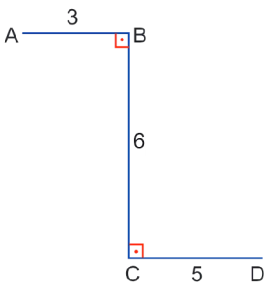
[BD] ve [CD] açıortay

$m(\widehat{BDC}) = 70°$

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

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

6



[AB] ⊥ [BC]

[BC] ⊥ [CD]

|AB| = 3 cm

|BC| = 6 cm

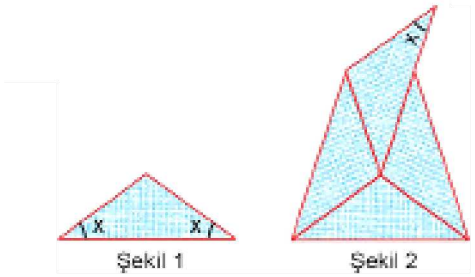
|CD| = 5 cm

Yukarıdaki verilere göre, A ve D noktaları arası <u>en kısa</u> uzaklık kaç cm dir?

A) 9 B) 10 C) 13 D) 14 E) 15

COOLMATEMATİK

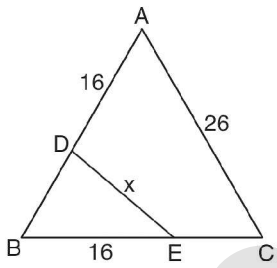
7 Amblem tasarlayan Hande, Şekil 1'deki ikizkenar üçgen biçimindeki kartondan dört tanesini bir masa üzerinde aralarında boşluk bırakmadan birleştirerek her birinin tamamen görünüdüğü Şekil 2'deki deseni elde ediyor.



Buna göre, x açısının ölçüsü kaç derecedir?

A) 15 B) 20 C) 30 D) 36 E) 48

8



ABC eşkenar üçgen

$|AC| = 26$ cm

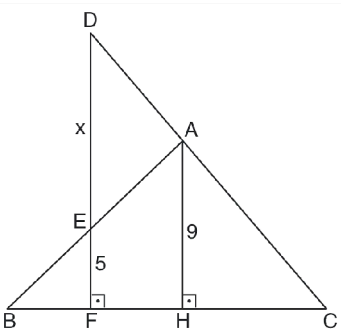
$|AD| = |BE| = 16$ cm

$|DE| = x$

Yukarıdaki verilere göre, x kaç cm dir?

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

9



ABC ikizkenar üçgen

$|AB| = |AC|$

$AH \perp BC$

$DF \perp BC$

$|AH| = 9$ cm

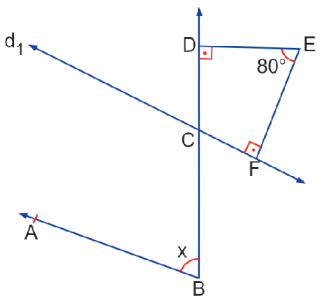
$|EF| = 5$ cm

$|DE| = x$

C, A, D doğrusal olduğuna göre, x kaç cm dir?

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

10



Yandaki şekilde,

$[BA \,//\, d_1$

$[EF] \perp d_1$

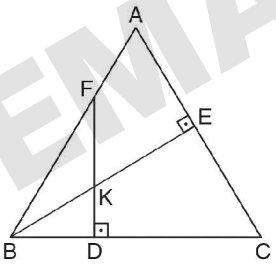
$[BD \perp [ED]$

$m(\widehat{DEF}) = 80°$

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

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

11



ABC eşkenar üçgen

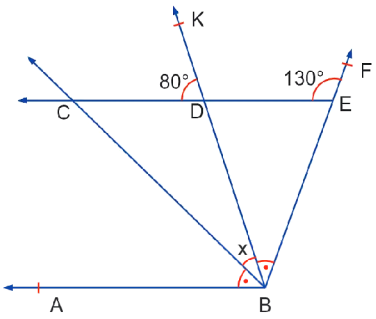
$[FD] \perp [BC]$

$[AC] \perp [BE]$

Yukarıdaki verilere göre, $\frac{|FK|}{|KD|}$ oranı kaçtır?

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

12



$[BA \,//\, [EC$

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

$m(\widehat{KDC}) = 80°$

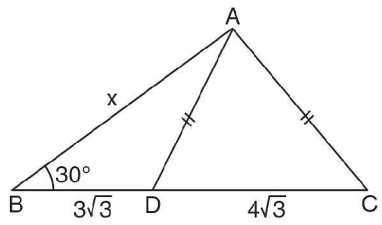
$m(\widehat{FEC}) = 130°$

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

A) 20 B) 30 C) 35 D) 40 E) 45

COOLMATEMATİK

13



ABC bir üçgen

$m(\widehat{ABC}) = 30°$

$|AD| = |AC|$

$|BD| = 3\sqrt{3}$ cm

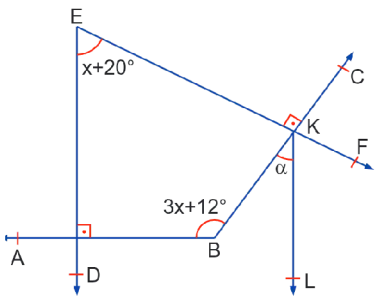
$|DC| = 4\sqrt{3}$ cm

$|AB| = x$

Yukarıdaki verilere göre, x kaç cm dir?

A) 6 B) 8 C) 10 D) 12 E) 14

14



$[ED \perp [BA$

$[EF \perp [BC$

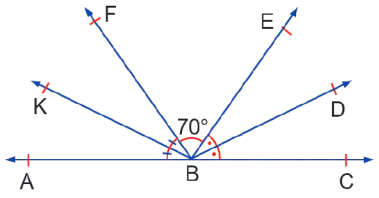
$[ED \,//\, [KL$

Yukarıdaki şekilde $m(\widehat{DEF}) = x+20°$ ve $m(\widehat{ABC}) = 3x+12°$ dir.

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

A) 33 B) 32 C) 30 D) 28 E) 27

15

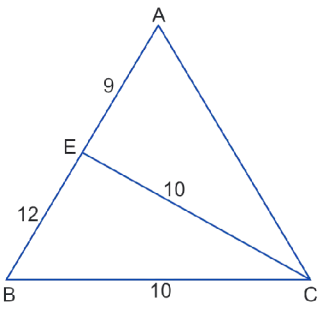


Yukarıdaki şekilde A, B, C noktaları doğrusal, [BD ışını $\widehat{EBC}$ açısının ve [BK ışını ise $\widehat{ABF}$ açısının açıortaylarıdır.

Buna göre, $m(\widehat{EBF}) = 70°$ ise $m(\widehat{DBK})$ kaç derecedir?

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

16



ABC bir üçgen

$|EC| = |BC| = 10$ cm

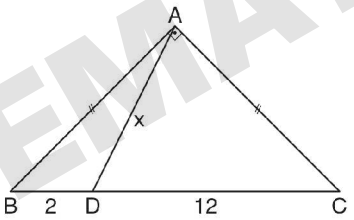
$|EB| = 12$ cm

$|AE| = 9$ cm

Yukarıdaki verilere göre, |AC| kaç cm dir?

A) 15 B) 16 C) 17 D) 18 E) 20

17



$[AB] \perp [AC]$

$|AB| = |AC|$

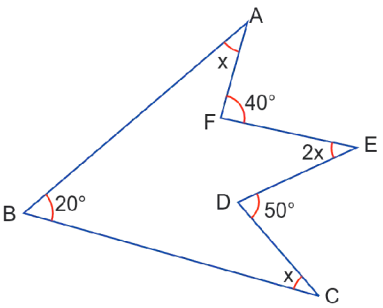
$|BD| = 2$ br

$|DC| = 12$ br

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

A) $\sqrt{70}$ B) $\sqrt{74}$ C) $2\sqrt{19}$ D) $2\sqrt{21}$ E) $2\sqrt{23}$

18



ABCDEF bir konkav altıgen

$m(\widehat{DEF}) = 2x$

$m(\widehat{AFE}) = 40°$

$m(\widehat{EDC}) = 50°$

$m(\widehat{ABC}) = 20°$

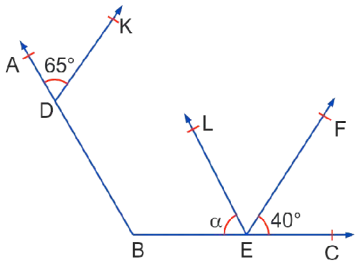
$m(\widehat{BAF}) = m(\widehat{BCD}) = x$

Yukarıdaki verilere göre, $m(\widehat{DEF}) = 2x$ kaç derecedir?

A) 25 B) 30 C) 35 D) 45 E) 50

COOLMATEMATİK

19



[BA // [EL

[DK // [EF

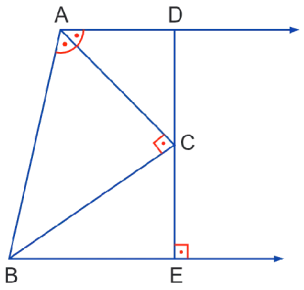
$m(\widehat{FEC}) = 40°$

$m(\widehat{ADK}) = 65°$

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

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

20



[AD // [BE

[DE] ⊥ [BE

[AC] açıortay

$m(\widehat{ACB}) = 90°$

$|DC| = (x + 2)$ cm

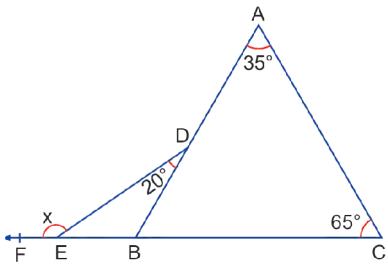
$|EC| = (y - 1)$ cm

$2x + y = 9$ cm

Yukarıdaki verilere göre, x.y çarpımı kaçtır?

A) 5 B) 8 C) 10 D) 12 E) 15

21



ABC bir üçgen

$m(\widehat{BAC}) = 35°$

$m(\widehat{FCA}) = 65°$

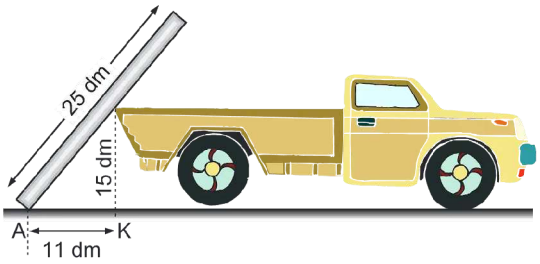
$m(\widehat{EDB}) = 20°$

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

Yukarıdaki verilere göre, x kaç derecedir?

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

22



Şekilde 25 dm uzunluğundaki kalas, A ucu yerde sabit olmak üzere kamyonete dayanmaktadır.

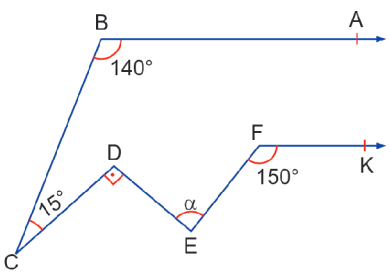
Kasanın yerden yüksekliği 15 dm ve $|AK| = 11$ dm olduğuna göre, **kalası düşürmeden araba ileri doğru <u>en fazla</u> kaç dm gidebilir?**

A) 20 B) 10 C) 9 D) 8

23 **Komşu tümler iki açının açıortayları arasındaki açının ölçüsü kaç derecedir?**

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

24



[BA // FK

$m(\widehat{ABC}) = 140°$

$m(\widehat{BCD}) = 15°$

$m(\widehat{CDE}) = 90°$

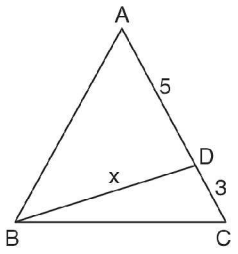
$m(\widehat{EFK}) = 150°$

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

A) 70 B) 75 C) 80 D) 85 E) 95

COOLMATEMATİK

25



ABC eşkenar üçgen

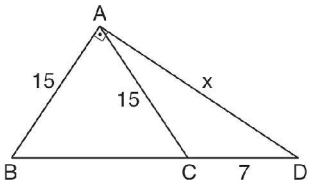
|ADI = 5 cm

|DCI = 3 cm

Yukarıdaki verilere göre, |BDI = x kaç cm dir?

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

26



[AB] ⊥ [AD]

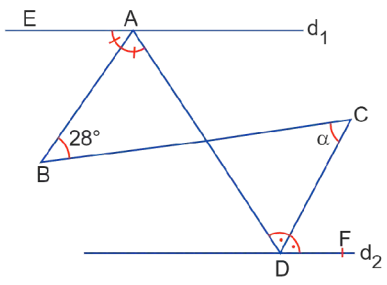
|ABI = |ACI = 15 br

|CDI = 7 br

Yukarıda verilenlere göre, |ADI = x kaç birimdir?

A) 16 B) 18 C) 20 D) 24 E) 25

27



$d_1 // d_2$

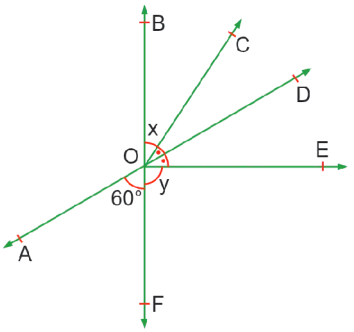
$m(\widehat{ABC}) = 28°$

[BA] ve [DC] sırası ile $\widehat{EAD}$ ve $\widehat{ADF}$ açılarının açıortaylarıdır.

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

A) 14 B) 28 C) 36 D) 56 E) 60

28



B, O, F ve A, O, D noktaları doğrusal

$m(\widehat{COD}) = m(\widehat{DOE})$

$m(\widehat{AOF}) = 60°$

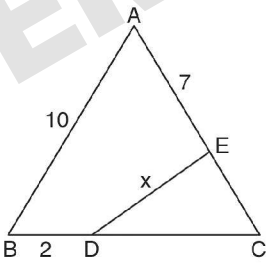
$m(\widehat{BOC}) = x$

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

Yukarıdaki verilere göre, y–x kaç derecedir?

A) 30 B) 40 C) 50 D) 60 E) 80

29



ABC eşkenar üçgen

|IBDI = 2 br

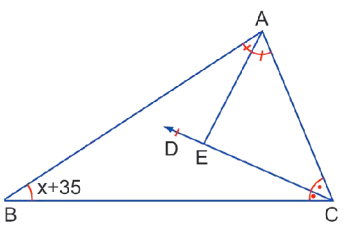
|IAEI = 7 br

|IABI = 10 br

Yukarıdaki verilere göre, |IDEI = x kaç br dir?

A) 3 B) 4 C) 5 D) 7 E) 8

30



ABC bir üçgen

[AE] ve [CE] açıortay

$m(\widehat{ABC}) = x + 35°$

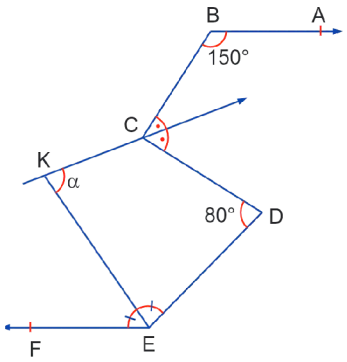
$m(\widehat{AED}) = 2x + 10°$

Yukarıdaki verilere göre, x kaç derecedir?

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

COOLMATEMATİK

31



[BA // [EF

[KC ve [EK sırasıyla $m(\widehat{BCD})$ ile $m(\widehat{DEF})$ açılarının açıortayıdır.

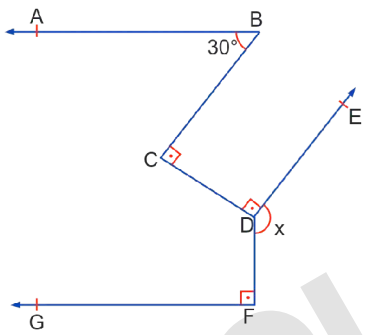
$m(\widehat{ABC}) = 150°$

$m(\widehat{CDF}) = 80°$

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

A) 80 B) 75 C) 70 D) 65 E) 55

32



[AB] // [GF]

$m(\widehat{ABC}) = 30°$

[BC] ⊥ [CD]

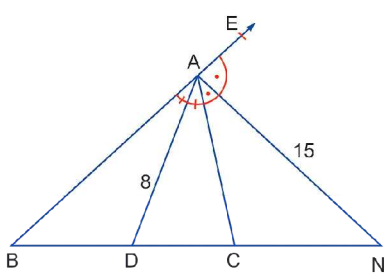
[CD] ⊥ [DE]

[DF] ⊥ [FG]

Buna göre, $m(\widehat{EDF})$ kaç derecedir?

A) 120 B) 125 C) 130 D) 140 E) 150

33



ABN bir üçgen

[AD] içaçıortay

[AN] dış açıortay

|AD| = 8 cm

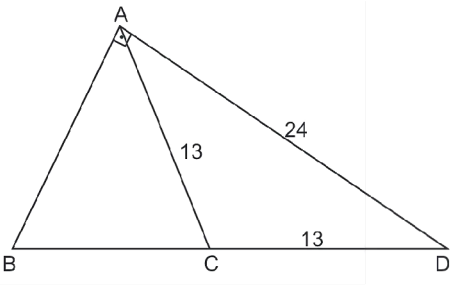
|AN| = 15 cm

|BN| = 24 cm

Yukarıdaki verilere göre, |BD| kaç cm dir?

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

34



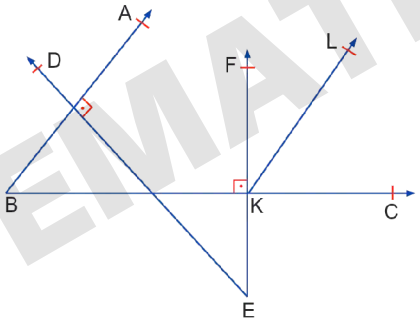
ABC dik üçgen

[AB] ⊥ [AD] , |AC| = |DC| = 13 cm ve |AD| = 24 cm

Yukarıdaki verilere göre, |AB| kaç cm dir?

A) 8 B) 10 C) 12 D) 15 E) 17

35



[BA ⊥ [ED

[BC ⊥ [EF

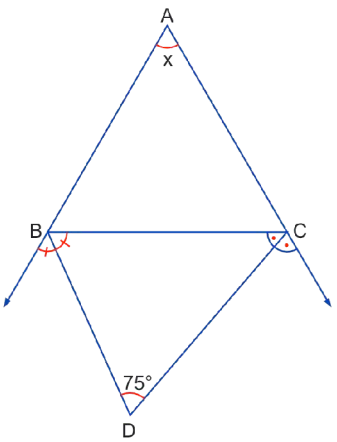
[BA // [KL

Yukarıdaki şekilde $m(\widehat{ABC}) = 2x+40°$ ve $m(\widehat{DEF}) = 6x - 20°$ dir.

Buna göre, FKL açısının ölçüsü kaç derecedir?

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

36



ABC bir üçgen

[BD] ve [CD] dışaçıortay

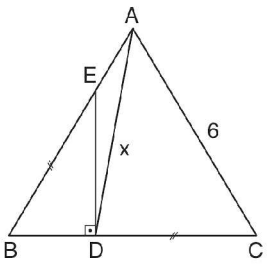
$m(\widehat{BDC}) = 75°$

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

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

COOLMATEMATİK

37



ABC eşkenar üçgen

[ED] ⊥ [BC]

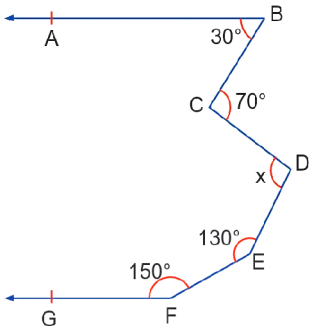
|BE| = |DC|

|AC| = 6 br

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

A) $2\sqrt{3}$ B) $2\sqrt{5}$ C) $2\sqrt{6}$ D) $2\sqrt{7}$ E) $2\sqrt{10}$

38



$d_1 // d_2$

$m(\widehat{ABC}) = 30°$

$m(\widehat{DEF}) = 130°$

$m(\widehat{BCD}) = 70°$

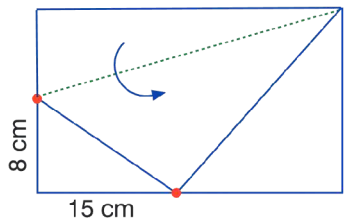
$m(\widehat{EFG}) = 150°$

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

Yukarıdaki verilere göre, x kaç derecedir?

A) 90 B) 100 C) 110 D) 120 E) 130

39

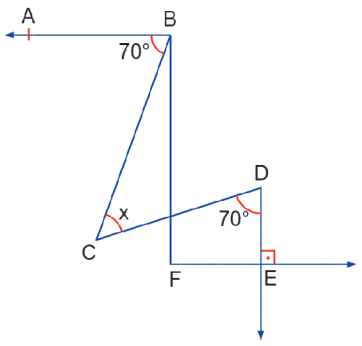


Dikdörtgen biçimindeki bir kağıt, şekildeki gibi bir köşesi uzun kenarının üzerine gelecek biçimde katlanıyor.

Şekilde verilen ölçülere göre, bu kağıdın kısa kenarının uzunluğu kaç santimetredir?

A) 17 B) 23 C) 24 D) 25

40



[BA // [FE

$m(\widehat{ABC}) = 70°$

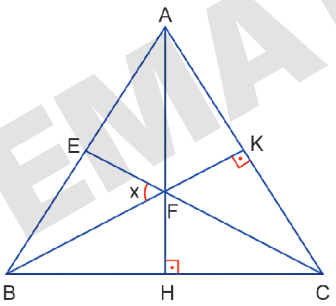
$m(\widehat{CDE}) = 70°$

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

Yukarıdaki verilere göre, x kaç derecedir?

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

41



ABC bir üçgen

[AH] ⊥ [BC]

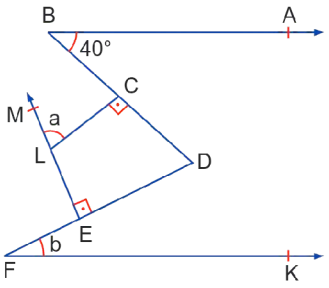
[BK] ⊥ [AC]

$m(\widehat{BAC}) = 70°$

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

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

42



Yukarıdaki şekilde,

[BA // [FK [FD] ⊥ [EM, [BD] ⊥ [CL]

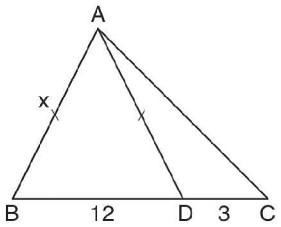
$m(\widehat{CLM}) = a°$, $m(\widehat{KFD}) = b°$, $m(\widehat{ABD}) = 40°$

ve a = 3b olduğuna göre, a + b kaçtır?

A) 60 B) 64 C) 70 D) 80 E) 84

COOLMATEMATİK

43



ABC bir üçgen

|ACI = |BCI

|ABI = |ADI

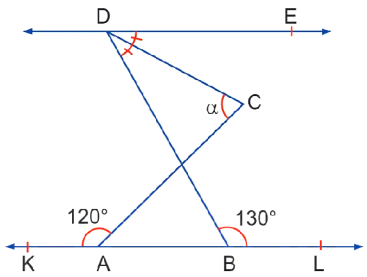
|DCI = 3 br

|BDI = 12 br

Yukarıdaki verilere göre, |ABI = x kaç br dir?

A) $6\sqrt{2}$ B) $4\sqrt{5}$ C) 10 D) 13 E) $6\sqrt{5}$

44



DE // KL

[DC] açıortay

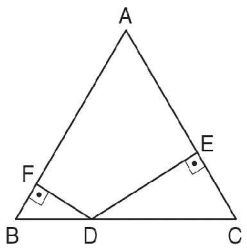
$m(\widehat{KAC}) = 120°$

$m(\widehat{DBL}) = 130°$

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

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

45



ABC bir üçgen

[DF] ⊥ [AB]

[DE] ⊥ [AC]

|ABI = |ACI = 10 br

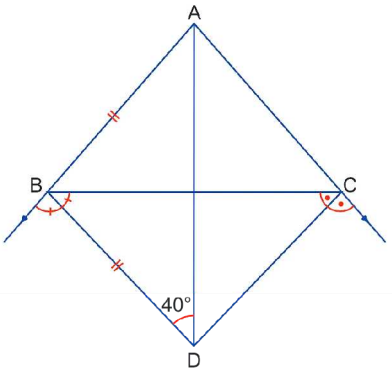
|DEI = 5 br

|DFI = 3 br

Yukarıdaki verilere göre, |BCI kaç br dir?

A) $4\sqrt{5}$ B) 9 C) $5\sqrt{5}$ D) $6\sqrt{2}$ E) $\sqrt{70}$

46



ABC bir üçgen

[BD] ve [CD]

dış açıortay

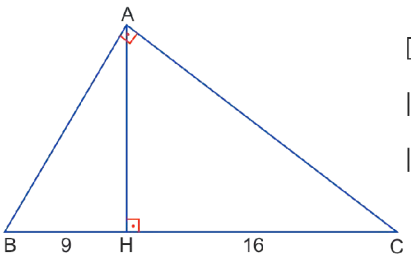
$m(\widehat{ADB}) = 40°$

|AB| = |BD|

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

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

47



BAC dik üçgen

[AH] ⊥ [BC]

|BH| = 9 cm

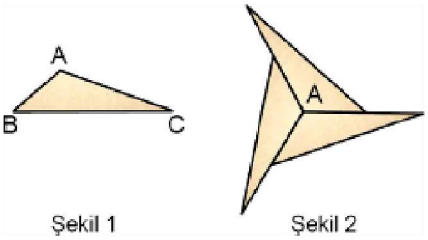
|HC| = 16 cm

Yukarıdaki verilere göre, |AB| + |AC| + |AH| toplamı kaç cm dir?

A) 40 B) 43 C) 45 D) 47 E) 52

COOLMATEMATİK

48 Köşeleri A, B ve C harfleriyle isimlendirilmiş üçgen biçimindeki bir ABC kartonu Şekil 1'deki gibi gösterilmiştir. 3 tane ABC kartonu, A köşeleri çakıştırılıp kenarlar arasında boşluk kalmayacak ve kartonlar üst üste gelmeyecek biçimde düz bir zemin üzerinde Şekil 2'deki gibi birleştirilebilmektedir.

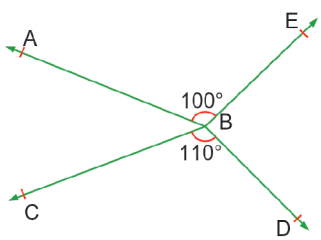


Aynı işlem, 9 tane ABC kartonu kullanılarak kartonların B köşeleri çakıştırılıp yapılabilmektedir.

Buna göre, bu işlem kaç tane ABC kartonu kullanılarak kartonların C köşeleri çakıştırılıp yapılabilir?

A) 10 B) 12 C) 15 D) 18 E) 20

49



$m(\widehat{ABE}) = 100°$

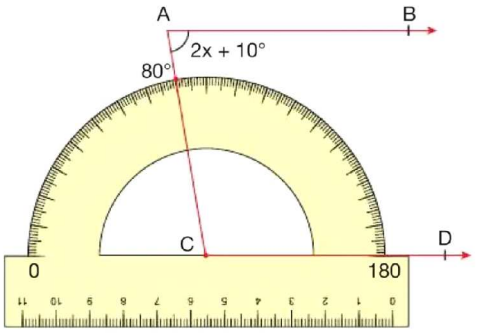
$m(\widehat{CBD}) = 110°$

$m(\widehat{EBD}) = 2m(\widehat{ABC})$

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

A) 30 B) 40 C) 50 D) 60 E) 80

50

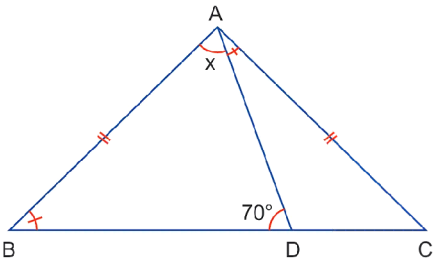


Yukarıdaki şekilde [AB // [CD ve $m(\widehat{BAC}) = 2x + 10°$ dir.

Açıölçerdeki verilere göre, x kaç derecedir?

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

51



ABC bir ikizkenar üçgen

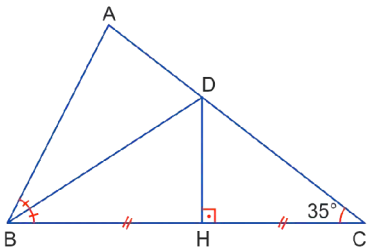
$|AB| = |AC|$, $m(\widehat{ABC}) = m(\widehat{DAC})$, $m(\widehat{ADB}) = 70°$

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

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

COOLMATEMATİK

52



ABC bir üçgen

[BD] açıortay

[DH] ⊥ [BC]

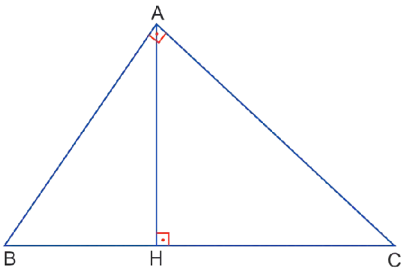
|BH| = |HC|

m(ACB) = 35°

Yukarıdaki verilere göre, m(BAC) kaç derecedir?

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

53



BAC dik üçgen

[AH] ⊥ [BC]

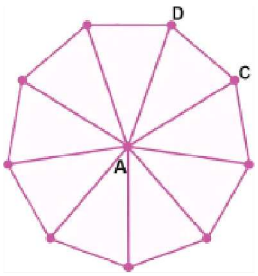
|BH| = 4 – √2 cm

HC| = 4 + √2 cm

Yukarıdaki verilere göre, |AH| kaç cm dir?

A) $2\sqrt{3}$ B) $\sqrt{14}$ C) 4 D) $2\sqrt{5}$ E) 5

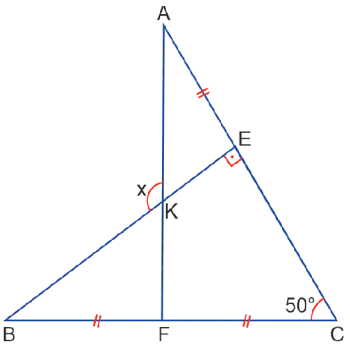
54 Bir okulun bahçesine üniversite tanıtım günleri için 9 tanıtıcı gelecektir. Her tanıtıcı için ayrı bir bölme oluşturmak isteyen okul müdürü, okul bahçesinin zeminine tepe noktası şekildeki gibi A noktası olan 9 eş ikizkenar üçgen çizmek istiyor.



Buna göre okul müdürünün yapacağı çizimde ADC açısının ölçüsü kaç derece olmalıdır?

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

55



AFC ve BEC bir üçgen

[BE] ⊥ [AC]

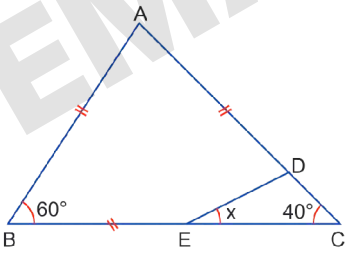
|AE| = |BF| = |FC|

m(ACB) = 50°

Yukarıdaki verilere göre, m(AKB) = x kaç derecedir?

A) 100 B) 110 C) 115 D) 125 E) 130

56



ABC bir üçgen

|AB| = |BE| = |AD|

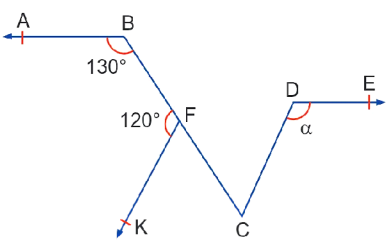
m(ABC) = 60°

m(ACB) = 40°

Yukarıdaki verilere göre, m(DEC) = x kaç derecedir?

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

57



m(ABC) = 130°

m(BFK) = 120°

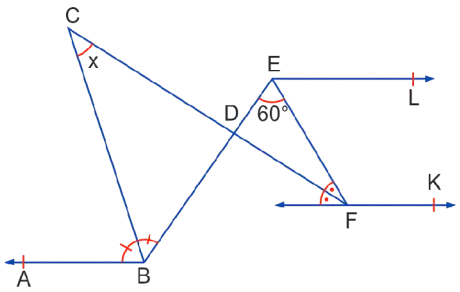
Yukarıdaki şekilde [BA // [DE ve [FK // [DC] dir.

Buna göre, m(CDE) = α kaç derecedir?

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

COOLMATEMATİK

58

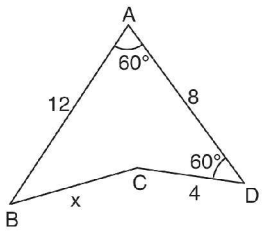


Yukarıdaki şekilde [BA // [EL] // FK [BC] ve [FC] açıortay

$m(\widehat{BEF}) = 60°$ olduğuna göre, $m(\widehat{BCF}) = x$ kaç derecedir?

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

59



ABCD iç bükey dörtgen

$m(\widehat{BAD}) = m(\widehat{ADC}) = 60°$

$|AB| = 12$ cm

$|AD| = 8$ cm

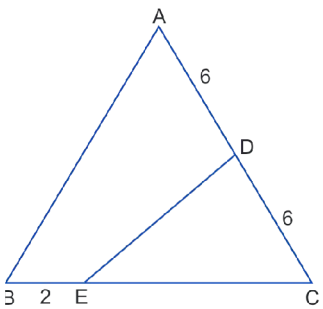
$|CD| = 4$ cm

$|BC| = x$

Yukarıdaki verilere göre, x kaç cm dir?

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

60



ABC bir eşkenar üçgen

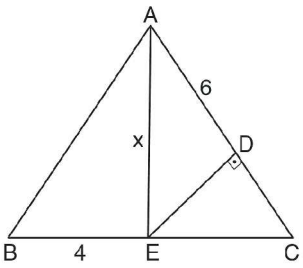
$|AD| = |DC| = 6$ cm

$|BE| = 2$ cm

Yukarıdaki verilere göre, |DE| kaç cm dir?

A) 7 B) 8 C) $6\sqrt{2}$ D) $2\sqrt{19}$ E) 9

61



ABC eşkenar üçgen

$ED \perp AC$

$|AD| = 6$ cm

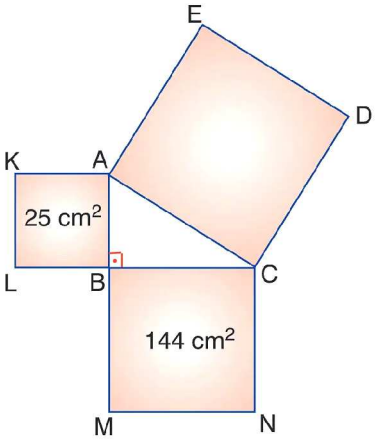
$|BE| = 4$ cm

$|AE| = x$

Yukarıdaki verilere göre, x kaç cm dir?

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

62



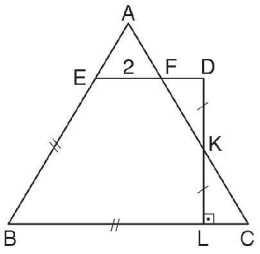
Şekilde ABC dik üçgen, ABLK, CNMB ve EDCA karedir.

$A(ABLK) = 25$ cm^2 ve $A(CNMB) = 144$ cm^2 olduğuna göre, **$A(ACDE)$ kaç cm^2 dir?**

A) 100 B) 121 C) 144 D) 169

COOLMATEMATİK

63



ABC eşkenar üçgen

[DL] ⊥ [BC]

[DE] // [BC]

|DK| = |KL|

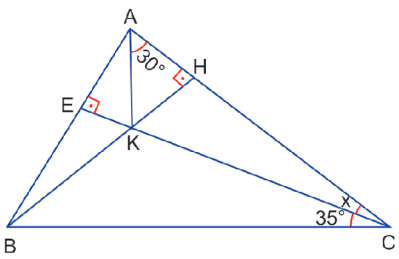
|EB| = |BL|

|EF| = 2 br

Yukarıdaki verilere göre, Çevre(ABC) kaç br^2 dir?

A) 18 B) 24 C) 30 D) 36 E) 42

64



ABC bir üçgen

[BH] ⊥ [AC]

[CE] ⊥ [AB]

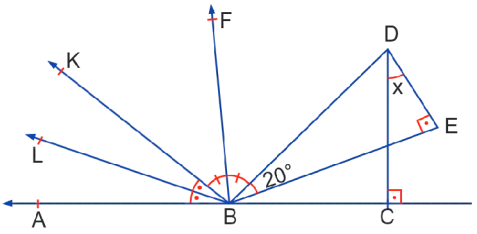
m(KAC) = 30°

m(BCE) = 35°

Yukarıdaki verilere göre, m(ACE) = x kaç derecedir?

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

65



Yukarıdaki şekilde ABK ve KBD açılarının açıortayları sırasıyla [BL ve [BF ışınlarıdır.

m(ACD) = m(BED) = 90°

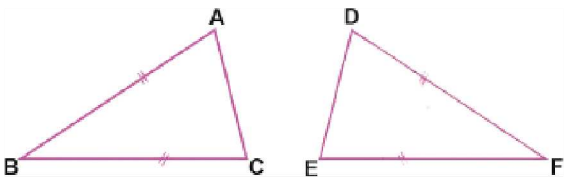
m(EBD) = 20°, m(LBF) = 60°

Buna göre, m(EDC) = x kaç derecedir?

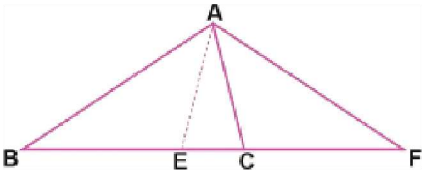
A) 20 B) 30 C) 40 D) 50 E) 60

66

Şekildeki ABC ve DEF üçgenleri birbirine eş ikizkenar üçgenlerdir.



A ve D noktaları çakışacak biçimde iki üçgen aşağıdaki şekildeki gibi üst üste getiriliyor. Üçgenlerin üst üste gelmesiyle oluşan AEC üçgeninin çevresi, |BF| na eşit oluyor.

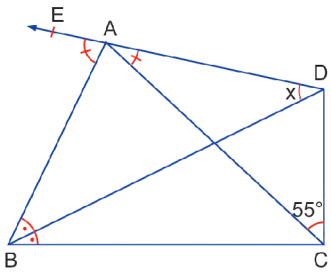


Buna göre EAC açısının ölçüsü kaç derecedir?

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

COOLMATEMATİK

67



ABC bir üçgen

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

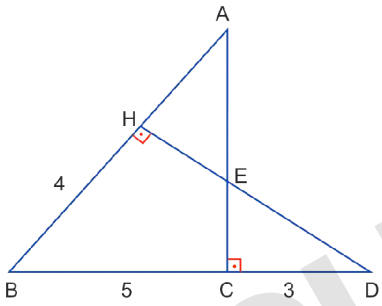
$m(\widehat{EAB}) = m(\widehat{CAD})$

$m(\widehat{ACD}) = 55°$

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

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

68



ABC dik üçgen

$[AC] \perp [BD]$

$[AB] \perp [DH]$

$|HB| = 4$ cm

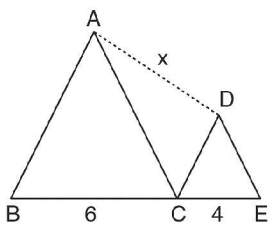
$|BC| = 5$ cm

$|CD| = 3$ cm

Yukarıdaki verilere göre, $|AH|$ kaç cm dir?

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

69



ABC ve DCE birer eşkenar üçgen

$|BC| = 6$ cm

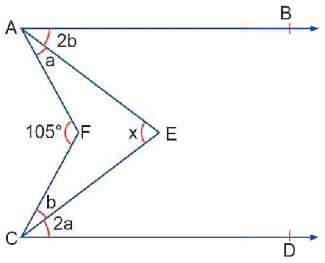
$|CE| = 4$ cm

B, C, E doğrusal noktalar

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

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

70



$[AB] // [CD]$

$m(\widehat{DCE}) = 2m(\widehat{EAF}) = 2a$

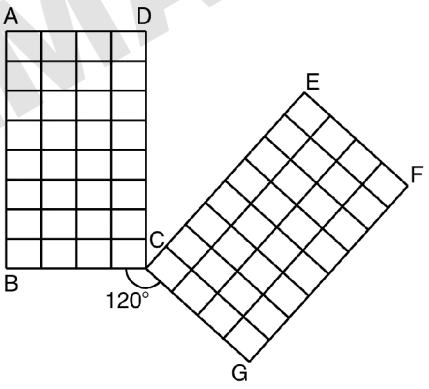
$m(\widehat{BAE}) = 2m(\widehat{ECF}) = 2b$

$m(\widehat{AFC}) = 105°$

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

A) 50 B) 60 C) 70 D) 80 E) 90

71

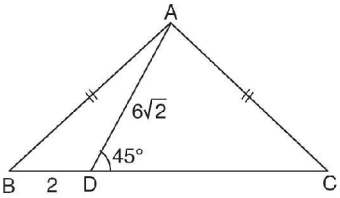


Yukarıdaki şekiller birim karelerden oluşturulmuştur.

$m(\widehat{BCG}) = 120°$ olduğuna göre, D ve E noktaları arasındaki uzaklık kaç br dir?

A) 8 B) $6\sqrt{2}$ C) $4\sqrt{5}$ D) 9 E) $6\sqrt{3}$

72



ABC ikizkenar üçgen

$|AB| = |AC|$

$m(\widehat{ADC}) = 45°$

$|AD| = 6\sqrt{2}$ cm

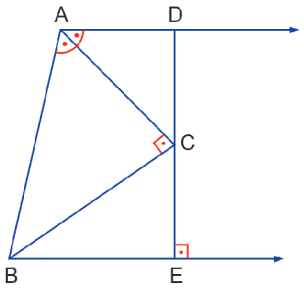
$|BD| = 2$ cm

Yukarıdaki verilere göre, ABC üçgeninin çevresi kaç cm dir?

A) 26 B) 28 C) 32 D) 36 E) 40

COOLMATEMATİK

73



[AD // [BE

[DE] ⊥ [BE

[AC] açıortay

$m(\widehat{ACB}) = 90°$

$|DC| = (x + 2)$ cm

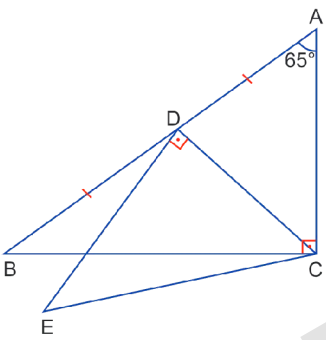
$|EC| = (y - 1)$ cm

$2x + y = 9$ cm

Yukarıdaki verilere göre, x.y çarpımı kaçtır?

A) 5 B) 8 C) 10 D) 12 E) 15

74



ACB ve EDC bir dik üçgen

[AC] ⊥ [BC]

[ED] ⊥ [DC]

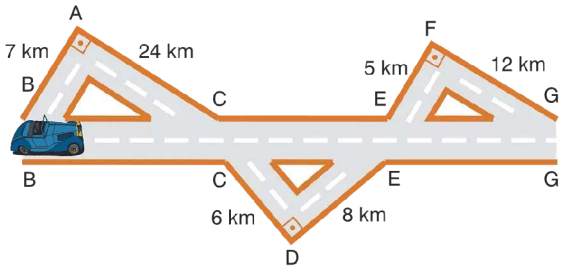
$|AD| = |BD| = |DE|$

$m(\widehat{BAC}) = 65°$

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

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

75

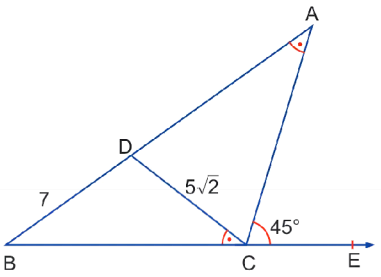


Bakkal Osman hergün arabasıyla B noktasındaki evinden G noktasındaki bakkalına BG yolundan gidip gelmektedir.

Buna göre, bakkal Osman evinden bakkalına gidip geldiğinde kaç km yol almış olur?

A) 44 B) 48 C) 54 D) 96

76



ABC bir üçgen

$m(\widehat{ACE}) = 45°$

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

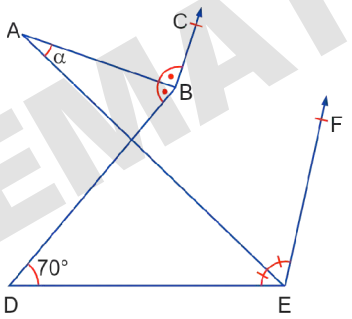
$|BD| = 7$ cm

$|DC| = 5\sqrt{2}$ cm

Yukarıdaki verilere göre, |BC| kaç cm dir?

A) 13 B) 14 C) 15 D) 16 E) 17

77



[BC // [EF

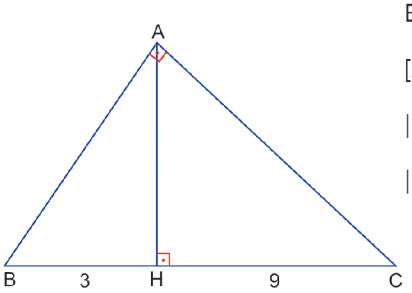
$m(\widehat{BDE}) = 70°$

[BA] ve [EA] sırası ile $\widehat{DBC}$ ve $\widehat{DEF}$ açılarının açıortaylarıdır.

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

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

78



BAC dik üçgen

[AH] ⊥ [BC]

|BH| = 3 cm

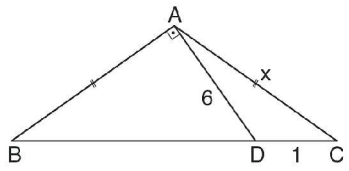
|HC| = 9 cm

Yukarıdaki verilere göre, |AB| kaç cm dir?

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

COOLMATEMATİK

79



ABC bir üçgen

[BA] ⊥ [DA]

|AB| = |AC|

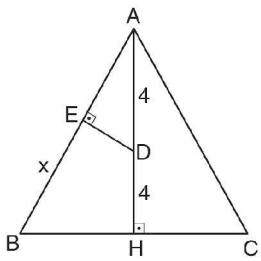
|DC| = 1 br

|AD| = 6 br

Yukarıdaki verilere göre, |AC| = x kaç br dir?

A) $\sqrt{38}$ B) $2\sqrt{5}$ C) $4\sqrt{3}$ D) $3\sqrt{5}$ E) $\sqrt{47}$

80



ABC eşkenar üçgen

AH ⊥ BC

DE ⊥ AB

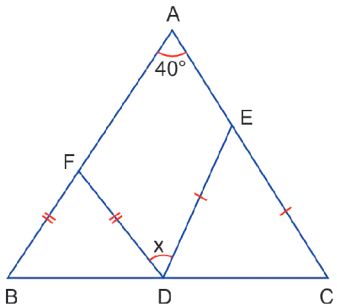
|AD| = |DH| = 4 cm

|EB| = x

Yukarıdaki verilere göre, x kaç cm dir?

A) $2\sqrt{3}$ B) $\frac{7\sqrt{3}}{3}$ C) $\frac{8\sqrt{3}}{3}$ D) $3\sqrt{3}$ E) $\frac{10\sqrt{3}}{3}$

81



ABC bir üçgen

|BF| = |FD|

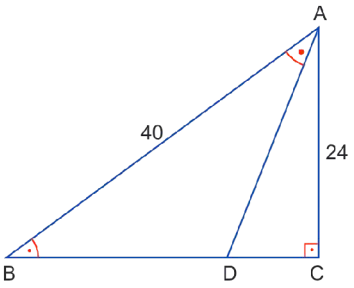
|ED| = |EC|

$m(\widehat{BAC}) = 40°$

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

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

82



ACB bir dik üçgen

[AC] ⊥ [CB]

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

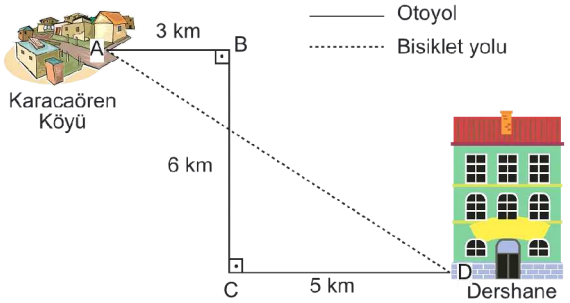
|AC| = 24 cm

|AB| = 40 cm

Yukarıdaki verilere göre, |DC| kaç cm dir?

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

83



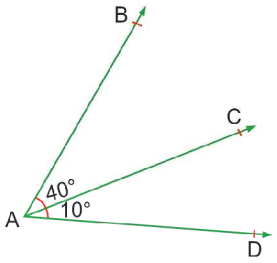
Karacaören Köyü'nden Çanakkale'deki dershaneye gitmek isteyen iki öğrenciden; 1. öğrenci otomobil ile şekildeki otoyoldan, 2. öğrenci bisikleti ile bisiklet yolundan dershaneye ulaşıyor.

|AB| = 3 km, |BC| = 6 km ve |CD| = 5 km olduğuna göre, **iki öğrencinin aldığı yollar arasında kaç km fark vardır?**

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

COOLMATEMATİK

84



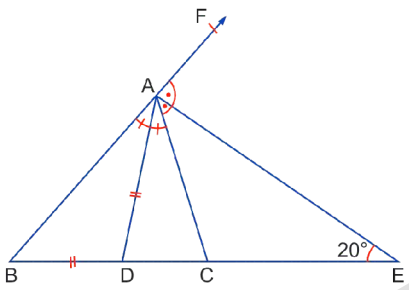
$m(\widehat{BAC}) = 40°$

$m(\widehat{CAD}) = 10°$

Yukarıdaki verilere göre, BAD ve CAD açılarının açıortayları arasındaki açı kaç derecedir?

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

85



ABC bir üçgen

[AD] iç açıortay

[AE] dış açıortay

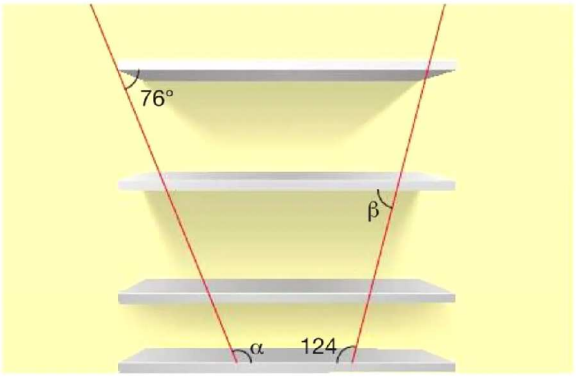
$m(\widehat{AEB}) = 20°$

$|AD| = |BD|$

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

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

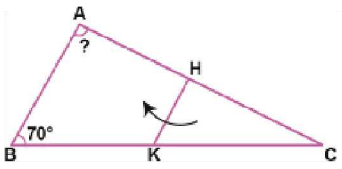
86



Duvardaki raflar paralel olduğuna göre, α + β toplamı kaç derecedir?

A) 100 B) 110 C) 124 D) 136 E)160

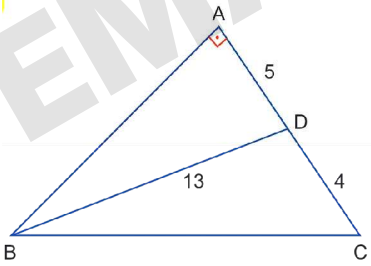
87 Üçgen biçimindeki ABC kağıdı [HK] boyunca C noktası A noktasının üzerine gelecek şekilde katlanıyor. |ABI = IKCI ve $m(\widehat{ABC}) = 70°$ dir.



Buna göre $m(\widehat{BAC})$ kaç derecedir?

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

88



BAC dik üçgen

|BD| = 13 cm

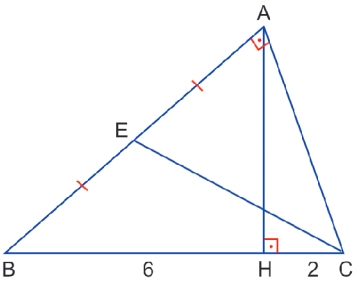
|AD| = 5 cm

|DC| = 4 cm

Yukarıdaki verilere göre, |BC| kaç cm dir?

A) 15 B) 16 C) 17 D) 20 E) 24

89



BAC dik üçgen

[AH] ⊥ [BC]

|AE| = |EB|

|BH| = 6 cm

|HC| = 2 cm

Yukarıdaki verilere göre, |EC| kaç cm dir?

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

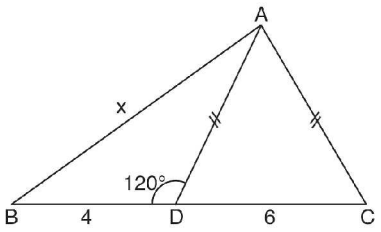
COOLMATEMATİK

90 Bir açının tümleyeninin 3 katı bütünleyenininden 20° fazladır.

Buna göre, bu açının ölçüsü kaç derecedir?

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

91



ABC bir üçgen

$m(\widehat{BDA}) = 120°$

$|AD| = |AC|$

$|DC| = 6$ cm

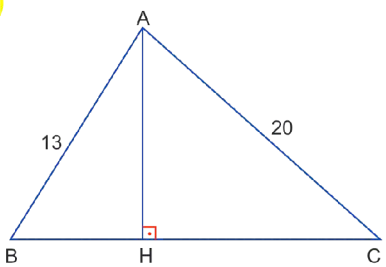
$|BD| = 4$ cm

$|AB| = x$

Yukarıdaki verilere göre, x kaç cm dir?

A) $2\sqrt{15}$ B) 8 C) $2\sqrt{17}$ D) $6\sqrt{2}$ E) $2\sqrt{19}$

92



ABC bir üçgen

$[AH] \perp [BC]$

$|AB| = 13$ cm

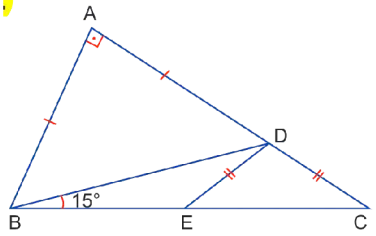
$|AC| = 20$ cm

$|BC| = 21$ cm

Yukarıdaki verilere göre, |HC| kaç cm dir?

A) 14 B) 15 C) 16 D) 17 E) 18

93



BAC bir dik üçgen

$[BA] \perp [CA]$

$|AB| = |AD|$

$|DE| = |DC|$

$m(\widehat{DBC}) = 15°$

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

A) 15 B) 20 C) 25 D) 28 E) 30

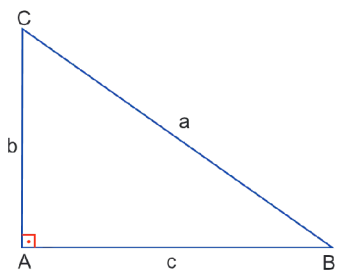
94 Aşağıda verilen yolların kenar çizgileri paraleldir.



$6m(\widehat{ABC}) = 3m(\widehat{DEF}) = 4m(\widehat{GHK})$ olduğuna göre, Lor Sokak ile Hür Sokak arasındaki açının ölçüsü kaç derecedir?

A) 120 B) 90 C) 80 D) 60 E) 30

95



BAC dik üçgen

$|BC| = a$

$|AC| = b$

$|AB| = c$

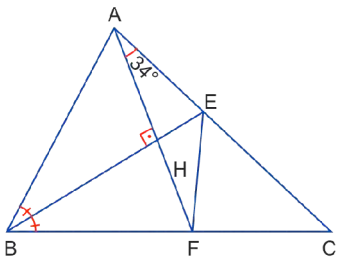
$a^2 + b^2 + c^2 = 200$ cm^2

Yukarıdaki verilere göre, |BC| kaç cm dir?

A) 8 B) 9 C) 10 D) 12 E) 15

COOLMATEMATİK

96



ABC bir üçgen

[BE] açıortay

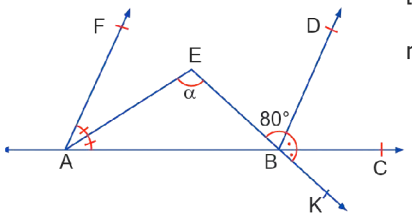
[BE] ⊥ [AF]

$m(\widehat{FAC}) = 34°$

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

A) 52 B) 56 C) 58 D) 62 E) 66

97



[AF // [BD

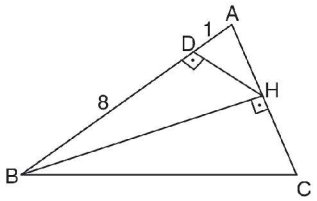
$m(\widehat{EBD}) = 80°$

Yukarıdaki şekilde $m(\widehat{EAF}) = m(\widehat{EAB})$ ve $m(\widehat{DBC}) = m(\widehat{CBK})$

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

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

98



ABC ikizkenar üçgen

$|BA| = |BC|$

BH ⊥ AC

HD ⊥ AB

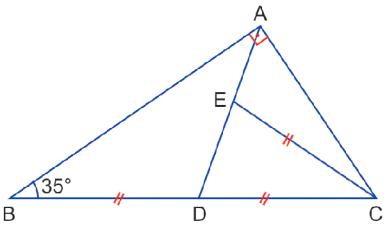
$|BD| = 8$ cm

$|AD| = 1$ cm

Yukarıdaki verilere göre, ABC üçgeninin çevresi kaç cm dir?

A) 30 B) 28 C) 26 D) 24 E) 22

99



BAC bir dik üçgen

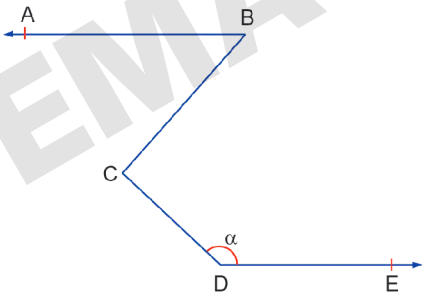
[BA] ⊥ [AC]

$|BD| = |DC| = |EC|$ $m(\widehat{ABC}) = 35°$

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

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

100



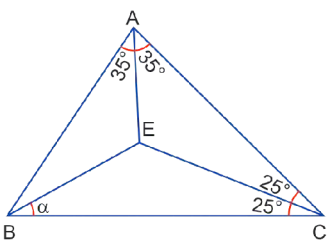
[AB] // [DE]

$m(\widehat{BCD}) = m(\widehat{ABC}) + 30°$

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

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

101



ABC bir üçgen

$m(\widehat{BAE}) = m(\widehat{EAC}) = 35°$

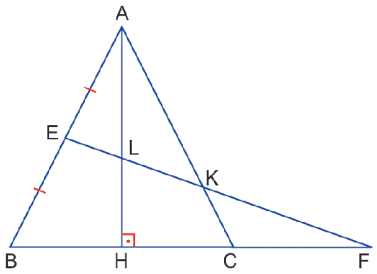
$m(\widehat{ACE}) = m(\widehat{BCE}) = 25°$

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

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

COOLMATEMATİK

102



ABC eşkenar üçgen

[AH] ⊥ [BF]

|AE| = |EB|

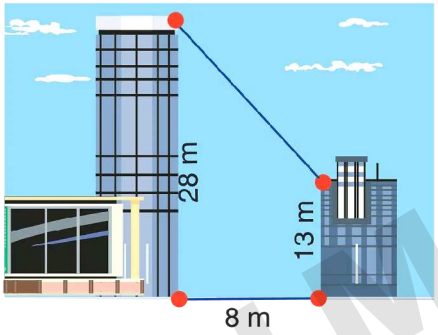
|AH| = |CF|

E, L, K, F noktaları doğrusal

Yukarıdaki verilere göre, $\frac{|BE|}{|AL|}$ oranı kaçtır?

A) $2\sqrt{2}$ B) 2 C) $\sqrt{3}$ D) $\sqrt{2}$ E) 1

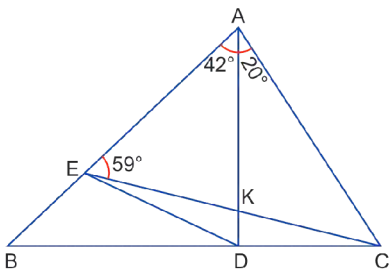
103



Boyları 13 m ve 28 m olan iki apartman arası 8 m dir. İki apartman arasına şekildeki gibi kablo çekilmek istenirse, **en az kaç m kablo gerekir?**

A) 13 B) 14 C) 15 D) 17

104



ABC bir üçgen

|AD| = |AC|

$m(\widehat{BAD}) = 42°$

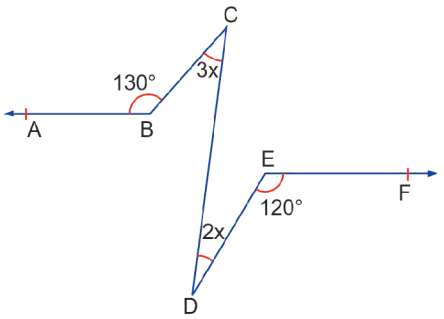
$m(\widehat{AEC}) = 59°$

$m(\widehat{DAC}) = 20°$

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

A) 20 B) 18 C) 16 D) 10 E) 8

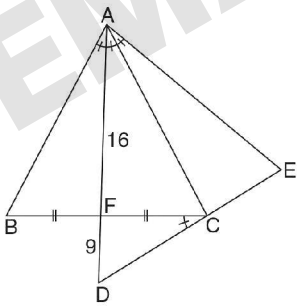
105



Yukarıdaki şekilde [BA // [EF, $m(\widehat{BCD}) = 3x$, $m(\widehat{CDE}) = 2x$, $m(\widehat{ABC}) = 130°$ ve $m(\widehat{DEF}) = 120°$ olduğuna göre, x kaç derecedir?

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

106



ABC ve ADE birer üçgen

|BF| = |FC|

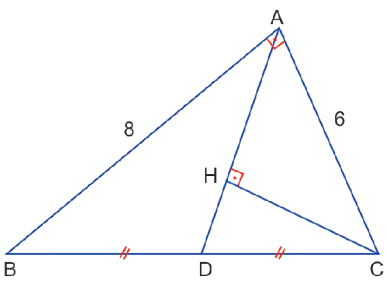
|AF| = 16 cm

|FD| = 9 cm

$m(\widehat{BAD}) = m(\widehat{DAC}) = m(\widehat{CAE}) = m(\widehat{BCD})$ olduğuna göre, |AB| – |CE| farkı kaç cm dir?

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

107



BAC dik üçgen

[BA] ⊥ [CA]

[CH] ⊥ [AD]

|AB| = 8 cm

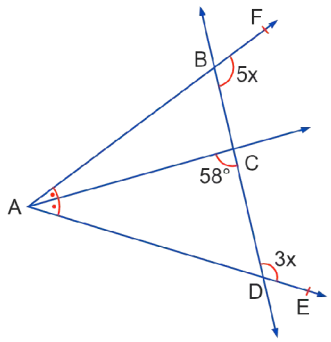
|AC| = 6 cm

Yukarıdaki verilere göre, |CH| kaç cm dir?

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

COOLMATEMATİK

108



Yandaki şekilde,

[AC açıortay

$m(\widehat{FBD}) = 5x$

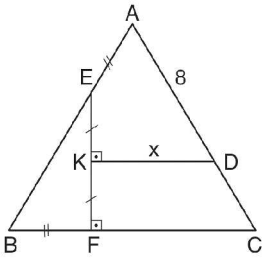
$m(\widehat{CDE}) = 3x$

$m(\widehat{ACD}) = 58°$

Yukarıdaki verilere göre, x kaç derecedir?

A) 15 B) 20 C) 28 D) 32 E) 35

109



ABC eşkenar üçgen

[EF] ⊥ [BC]

[EF] ⊥ [KD]

|AE| = |BF|

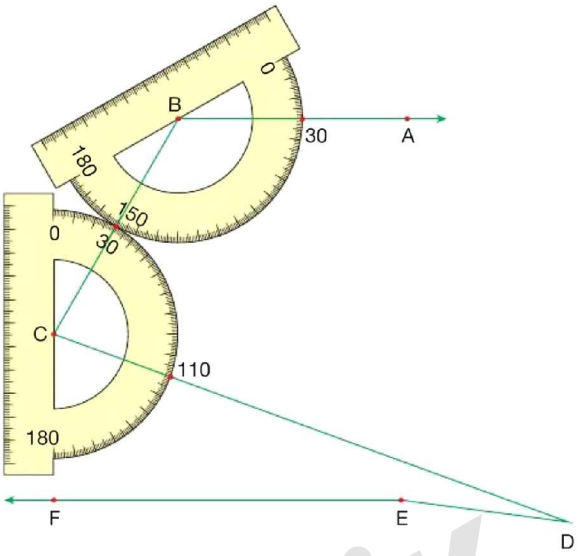
|EK| = |KF|

|AD| = 8 br

Yukarıdaki verilere göre, |KD| = x kaç birimdir?

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

110



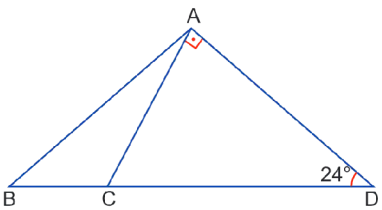
Şekilde açıortaylar üzerindeki açılar verilmiştir.

[BA // [EF, $m(\widehat{FED}) = 33 \cdot m(\widehat{EDC})$

olduğuna göre, $m(\widehat{EDC})$ kaç derecedir?

A) 5 B) 10 C) 12,5 D) 15 E) 20

111



ABD bir üçgen

[CA] ⊥ [AD]

|CD| = 2|AB|

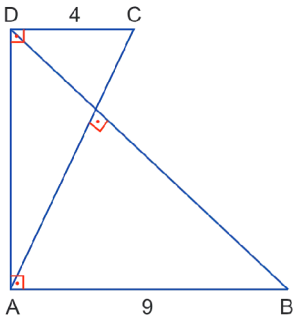
$m(\widehat{ADB}) = 24°$

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

A) 18 B) 20 C) 22 D) 24 E) 26

COOLMATEMATİK

112



ADC ve DAB bir dik üçgen

[AC] ⊥ [BD]

|DC| = 4 cm

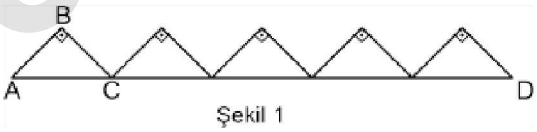
|AB| = 9 cm

Yukarıdaki verilere göre, |AD| kaç cm dir?

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

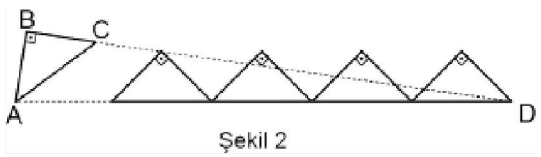
113

Dik kenar uzunlukları 1 birim olan 5 özdeş ikizkenar dik üçgen, hipotenüsleri aynı doğru üzerinde olacak ve yan yana gelen üçgenlerin birer köşesi çakışacak biçimde Şekil 1'deki gibi diziliyor.



Şekil 1

Sonra ABC üçgeni A noktası etrafında bir miktar döndürülüyor ve Şekil 2'deki gibi B, C ve D noktaları doğrusal oluyor.

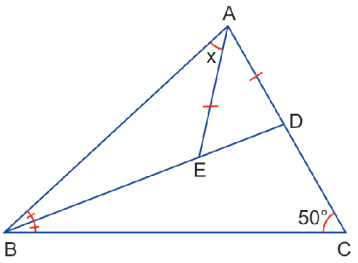


Şekil 2

Buna göre, son durumda C ve D noktaları arasındaki uzaklık kaç birimdir?

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

114



ABC bir üçgen

[BD] açıortay

|AE| = |AD|

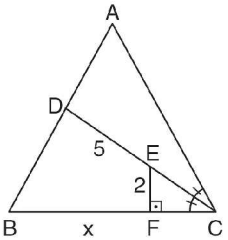
$m(\widehat{ACB}) = 50°$

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

Yukarıdaki verilere göre, x kaç derecedir?

A) 25 B) 30 C) 40 D) 50 E) 60

115



ABC eşkenar üçgen

[CD] açıortay

[EF] ⊥ [BC]

|DE| = 5 br

|EF| = 2 br

Yukarıdaki verilere göre, |BF| = x kaç birimdir?

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

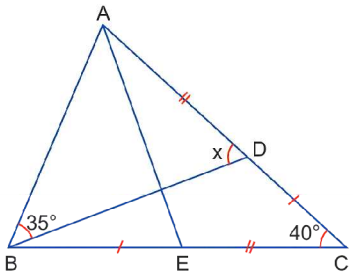
COOLMATEMATİK

116 Ölçüsü y olan bir açının bütünleri, ölçüsü x olan bir açının tümlerinin 4 katıdır. $x + y = 120°$ dir.

Buna göre, ölçüsü x olan açı ölçüsü y olan açının kaç katıdır?

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

117



ABC bir üçgen

$|AD| = |EC|$

$|DC| = |BE|$

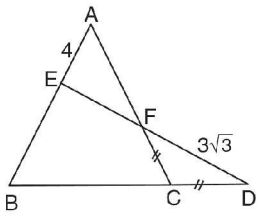
$m(\widehat{ACB}) = 40°$

$m(\widehat{ABD}) = 35°$

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

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

118



ABC eşkenar üçgen

$|FC| = |CD|$

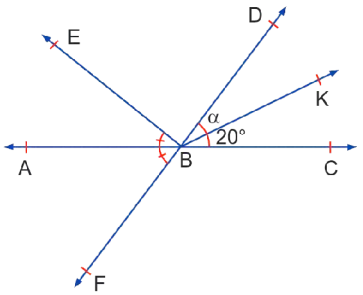
$|FD| = 3\sqrt{3}$ br

$|AE| = 4$ br

Yukarıdaki verilere göre, Çevre(ABC) kaç br dir?

A) 24 B) 28 C) 30 D) 33 E) 36

119



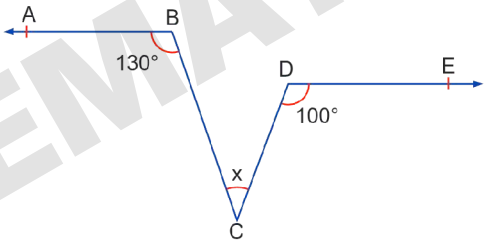
Yukarıdaki şekilde [BE ⊥ FD

A, B, C noktaları doğrusal ve [BA ışını $\widehat{EBF}$ açısının açıortayıdır.

Buna göre, $m(\widehat{KBC}) = 20°$ ise $m(\widehat{DBK}) = \alpha$ kaç derecedir?

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

120

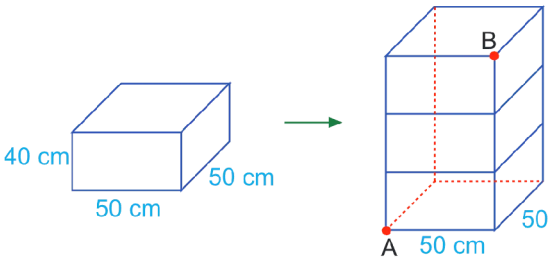


[BA // [DE $m(\widehat{ABC}) = 130°$ ve $m(\widehat{EDC}) = 100°$

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

A) 40 B) 50 C) 55 D) 60 E) 65

121



Şekil - 1 Şekil - 2

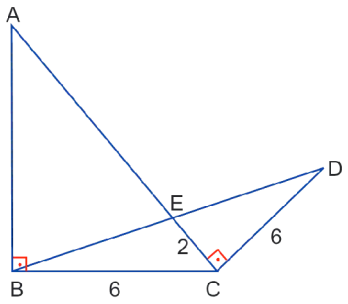
1. Şekildeki kare prizmalardan üç tanesi üst üste konularak 2. Şekil oluşturulmuştur.

Buna göre, bir karıncanın A noktasından B noktasına ulaşıncaya kadar izlediği en kısa mesafe kaç m dir?

A) 1 B) 1,3 C) 130 D) 170

COOLMATEMATİK

122



ABC dik üçgen

[AC] ⊥ [CD]

|BC| = 6 cm

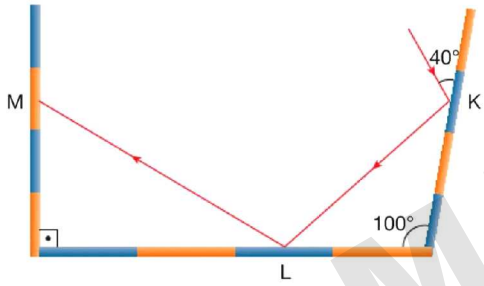
|CD| = 6 cm

|EC| = 2 cm

Yukarıdaki verilere göre, |AB| kaç cm dir?

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

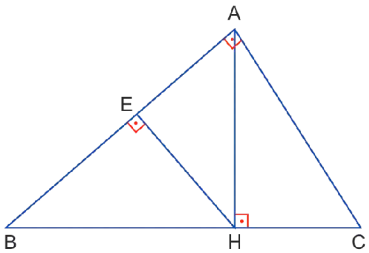
123 Düz aynaya α açısıyla gelen ışın yine α açısı ile yansır.



Şekildeki verilere göre, K aynasına 40° lik açı ile gelen ışın M aynasından kaç derecelik açı ile yansır?

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

124



BAC bir

dik üçgen

[AH] ⊥ [BC]

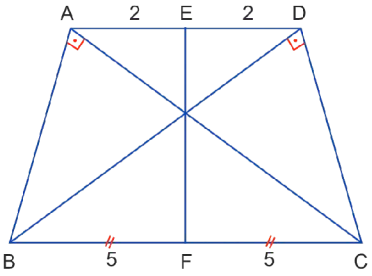
[HE] ⊥ [AB]

$|EH| \cdot |AC| = 18\ cm^2$

Yukarıdaki verilere göre, |AH| kaç cm dir?

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

125



BAC ve BDC

dik üçgen

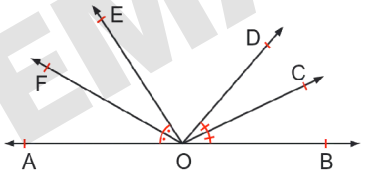
|AE| = |ED| = 2 cm

|BF| = |FC| = 5 cm

Yukarıdaki verilere göre, |EF| kaç cm dir?

A) 4 B) $\sqrt{21}$ C) 5 D) $\sqrt{26}$ E) 6

126



[OC ve [OF

açıortay

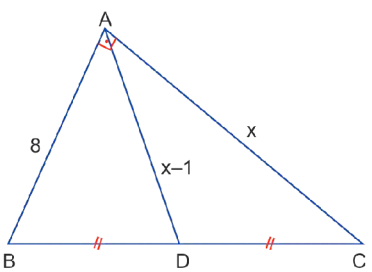
$m(\widehat{FOD}) = 115°$

$m(\widehat{EOC}) = 110°$

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

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

127



BAC dik üçgen

[BA] ⊥ [CA]

|BD| = |DC|

|AB| = 8 cm

|AC| = x

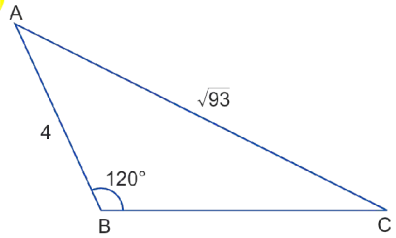
|AD| = x – 1

Yukarıdaki verilere göre, x kaç cm dir?

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

COOLMATEMATİK

128



ABC bir üçgen

$|AB| = 4$ cm

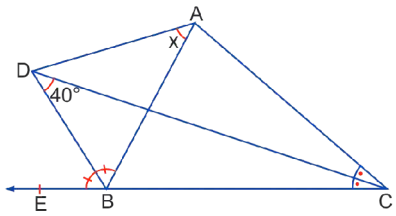
$|AC| = \sqrt{93}$ cm

$m(\widehat{ABC}) = 120°$

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

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

129



ABC bir üçgen

[CD] iç açıortay

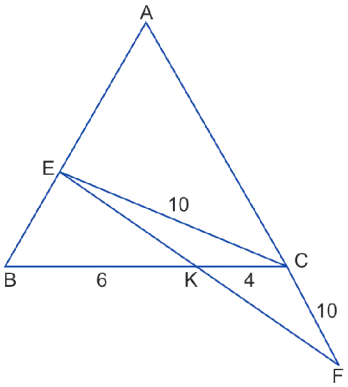
[BD] dış açıortay

$m(\widehat{BDC}) = 40°$

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

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

130



ABC bir ikizkenar üçgen

$|AB| = |AC|$

$|EC| = |CF| = 10$ cm

$|BK| = 6$ cm

$|KC| = 4$ cm

A, C, F doğrusal E, K, F doğrusal

Yukarıdaki verilere göre, $|EB|$ kaç cm dir?

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

COOLMATEMATİK

ÜÇGENLER

CEVAP ANAHTARI

No	Cevap
1.	C
2.	B
3.	C
4.	C
5.	D
6.	B
7.	D
8.	C
9.	B
10.	A
11.	B
12.	B
13.	C
14.	A
15.	A
16.	C
17.	B
18.	C
19.	A
20.	C
21.	E
22.	C
23.	B
24.	D
25.	E
26.	C
27.	B
28.	D
29.	D
30.	A
31.	D
32.	A
33.	B
34.	B
35.	E
36.	A
37.	D
38.	D
39.	D
40.	D
41.	A
42.	D
43.	E
44.	D
45.	A
46.	C
47.	D
48.	D
49.	C
50.	C
51.	C
52.	A
53.	B
54.	D
55.	C
56.	C
57.	A
58.	C
59.	B
60.	D
61.	A
62.	D
63.	C
64.	B
65.	C
66.	B
67.	B
68.	C
69.	D
70.	C
71.	A
72.	D
73.	C
74.	B
75.	D
76.	A
77.	D
78.	C
79.	D
80.	E
81.	B
82.	D
83.	C
84.	C
85.	B
86.	E
87.	C
88.	A
89.	B
90.	B
91.	E
92.	C
93.	A
94.	C
95.	C
96.	B
97.	B
98.	D
99.	A
100.	E
101.	C
102.	E
103.	D
104.	D
105.	D
106.	C
107.	A
108.	D
109.	B
110.	A
111.	A
112.	C
113.	C
114.	D
115.	C
116.	E
117.	D
118.	D
119.	B
120.	B
121.	B
122.	D
123.	C
124.	E
125.	B
126.	E
127.	A
128.	D
129.	C
130.	D