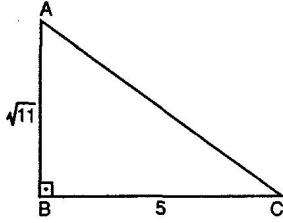


DİK ve ÖZEL ÜÇGENLER

DİK ve ÖZEL ÜÇGENLER

Konu Kavrama Testi - 1

1.

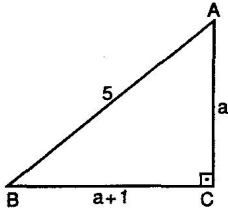


ABC bir dik üçgen
 $|AB| = \sqrt{11}$ cm
 $|BC| = 5$ cm

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

- A) $2\sqrt{7}$ B) $4\sqrt{2}$ C) 6 D) $2\sqrt{10}$ E) $4\sqrt{3}$

2.

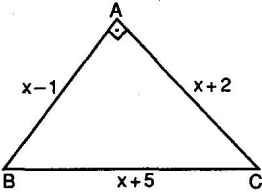


ACB bir dik üçgen
 $|AB| = 5$ cm
 $|AC| = a$
 $|BC| = a + 1$

Yukarıdaki verilere göre, a kaç cm dir?

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

3.

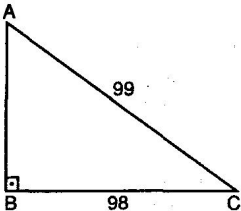


BAC bir dik üçgen
 $|AB| = x - 1$
 $|AC| = x + 2$
 $|BC| = x + 5$

Yukarıdaki verilere göre, x kaç cm dir?

- A) 9 B) 10 C) 12 D) 13 E) 15

4.

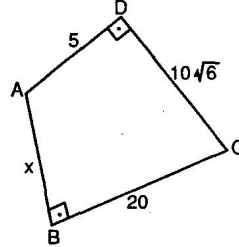


ABC bir dik üçgen
 $|AC| = 99$ cm
 $|BC| = 98$ cm

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

- A) $10\sqrt{2}$ B) $\sqrt{197}$ C) 14 D) $\sqrt{187}$ E) $\sqrt{167}$

5.

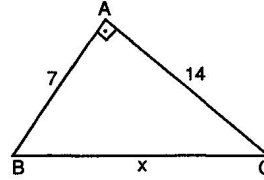


Düzlemsel şekilde
 $[AD] \perp [DC]$
 $[AB] \perp [BC]$
 $|AD| = 5$ cm
 $|BC| = 20$ cm
 $|DC| = 10\sqrt{6}$ cm
 $|AB| = x$

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

- A) 12 B) 15 C) 16 D) 20 E) 25

6.

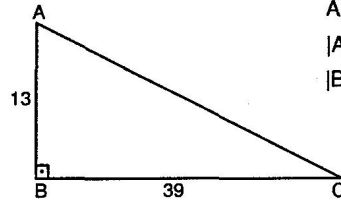


BAC bir dik üçgen
 $|AB| = 7$ cm
 $|AC| = 14$ cm
 $|BC| = x$

Yukarıdaki verilere göre, x kaç cm dir?

- A) $14\sqrt{5}$ B) $12\sqrt{5}$ C) $10\sqrt{5}$ D) $9\sqrt{5}$ E) $7\sqrt{5}$

7.

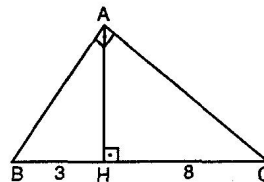


ABC bir dik üçgen
 $|AB| = 13$ cm
 $|BC| = 39$ cm

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

- A) $13\sqrt{10}$ B) $15\sqrt{10}$ C) $26\sqrt{10}$
D) $33\sqrt{10}$ E) $39\sqrt{10}$

8.

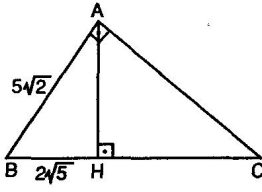


BAC bir dik üçgen
 $[AH] \perp [BC]$
 $|BH| = 3$ cm
 $|HC| = 8$ cm

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

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

9.

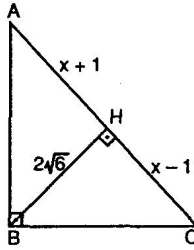


BAC bir
dik üçgen
[AH] $\perp$ [BC]
|AB| = $5\sqrt{2}$ cm
|BH| = $2\sqrt{5}$ cm

Yukarıdaki verilere göre, |HC| kaç cm dir?

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

10.

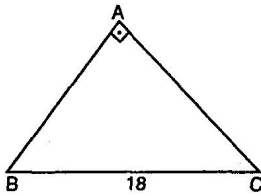


ABC bir dik üçgen
|AH| = $x+1$
|HC| = $x-1$
|BH| = $2\sqrt{6}$ cm

Yukarıdaki verilere göre, x kaç cm dir?

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

11.

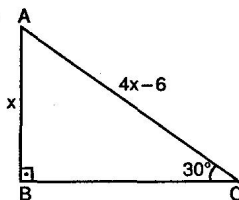


BAC bir ikizkenar
dik üçgen
|BC| = 18 cm

Yukarıdaki verilere göre, |AB| kaç cm dir?

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

12.

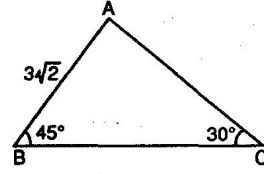


ABC bir dik üçgen
 $m(\widehat{ACB}) = 30^\circ$
|AC| = $4x-6$
|AB| = x

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

- A) 3 B) 4 C) 5 D) 6 E) 9

13.

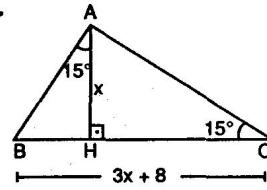


ABC bir üçgen
 $m(\widehat{ABC}) = 45^\circ$
 $m(\widehat{ACB}) = 30^\circ$
|AB| = $3\sqrt{2}$ cm

Yukarıdaki verilere göre, |AC| kaç cm dir?

- A) 6 B) $4\sqrt{3}$ C) 9 D) 10 E) 12

14.

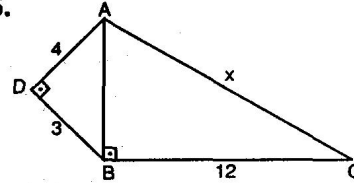


ABC bir üçgen
[AH] $\perp$ [BC]
 $m(\widehat{BAH}) = 15^\circ$
 $m(\widehat{ACB}) = 15^\circ$
|BC| = $3x+8$
|AH| = x

Yukarıdaki verilere göre, x kaç cm dir?

- A) 4 B) 6 C) 8 D) 12 E) 16

15.

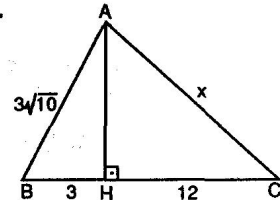


ABC ve ADB
birer dik üçgen
|AD| = 4 cm
|DB| = 3 cm
|BC| = 12 cm
|AC| = x

Yukarıdaki verilere göre, x kaç cm dir?

- A) 13 B) 15 C) 16 D) 20 E) 25

16.



ABC bir üçgen
[AH] $\perp$ [BC]
|AB| = $3\sqrt{10}$ cm
|BH| = 3 cm
|HC| = 12 cm
|AC| = x

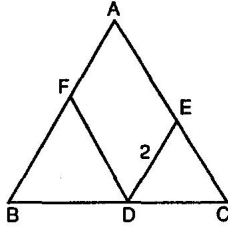
Yukarıdaki verilere göre, x kaç cm dir?

- A) 13 B) 15 C) 16 D) 20 E) 25

DİK ve ÖZEL ÜÇGENLER

Konu Kavrama Testi - 2

1.

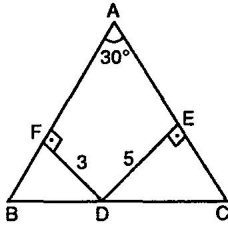


ABC bir
ikizkenar üçgen
[DE] // [BA]
[DF] // [CA]
|DE| = 2 cm
|AB| = |AC| = 10 cm

Yukarıdaki verilere göre, |DF| kaç cm dir?

- A) 9 B) 8 C) 7 D) 6 E) 4

2.

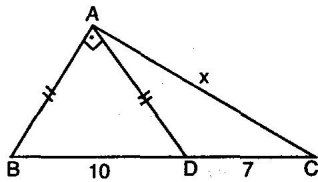


ABC bir
ikizkenar üçgen
[DE] ⊥ [AC]
[DF] ⊥ [AB]
m(BAC) = 30°
|DF| = 3 cm
|DE| = 5 cm

Yukarıdaki verilere göre, |AB| = |AC| kaç cm dir?

- A) 8 B) $8\sqrt{2}$ C) $8\sqrt{3}$ D) 12 E) 16

3.

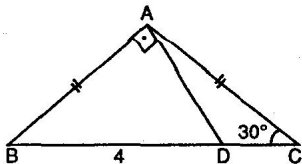


ABC bir üçgen
[BA] ⊥ [AD]
|AB| = |AD|
|BD| = 10 cm
|DC| = 7 cm
|AC| = x

Yukarıdaki verilere göre, x kaç cm dir?

- A) 10 B) 12 C) 13 D) 15 E) 16

4.

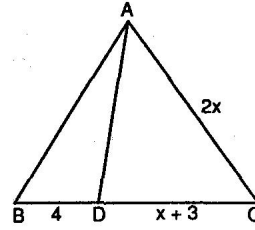


ABC bir
ikizkenar üçgen
[BA] ⊥ [AD]
m(ACB) = 30°
|BD| = 4 cm

Yukarıdaki verilere göre, |AB| = |AC| kaç cm dir?

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

5.

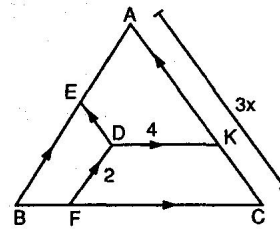


ABC bir
eşkenar üçgen
|AC| = 2x
|DC| = x + 3
|BD| = 4 cm

Yukarıdaki verilere göre, x kaç cm dir?

- A) 5 B) 6 C) 7 D) 8 E) 10

6.

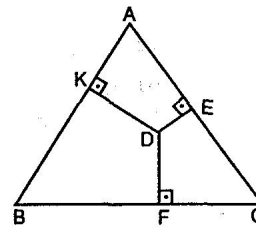


ABC bir
eşkenar üçgen
[DE] // [CA]
[DF] // [AB]
[DK] // [BC]
|DE| = x
|AC| = 3x
|DF| = 2 cm
|DK| = 4 cm

Yukarıdaki şekilde D üçgen içinde bir nokta olduğuna göre, x kaç cm dir?

- A) 2 B) 3 C) 4 D) 6 E) 9

7.

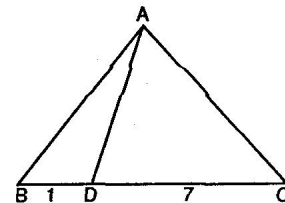


ABC bir
eşkenar üçgen
[DE] ⊥ [AC]
[DF] ⊥ [BC]
[DK] ⊥ [AB]
|DE| = $\sqrt{3}$ cm
|DF| = $3\sqrt{3}$ cm
|DK| = $4\sqrt{3}$ cm

Yukarıdaki şekilde D üçgen içinde bir nokta olduğuna göre, eşkenar üçgenin bir kenarının uzunluğu kaç cm dir?

- A) 8 B) $8\sqrt{3}$ C) 14 D) 16 E) 20

8.

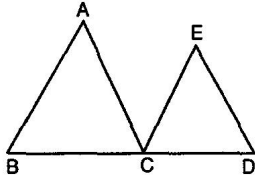


ABC bir
eşkenar üçgen
|BD| = 1 cm
|DC| = 7 cm

Yukarıdaki verilere göre, |AD| kaç cm dir?

- A) $5\sqrt{2}$ B) $3\sqrt{6}$ C) $\sqrt{57}$ D) 8 E) $6\sqrt{2}$

9.



ABC ve CDE
birer eşkenar üçgen
 $|BD| = 4$ cm

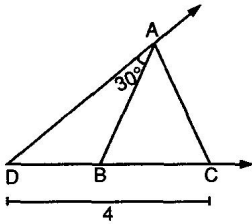
Yukarıdaki verilere göre, eşkenar üçgenlerin çevrelerinin toplamı kaç cm dir?

- A) 8 B) 10 C) 12 D) 16 E) 20

10. Yüksekliği $a\sqrt{3}$ birim olan bir eşkenar üçgenin çevresi kaç birimdir?

- A) 3a B) 4a C) 5a D) 6a E) 9a

11.

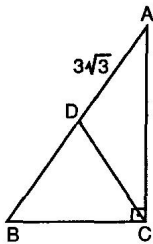


ABC bir
eşkenar üçgen
 $m(\widehat{BAD}) = 30^\circ$
 $|DC| = 4$ cm

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

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

12.

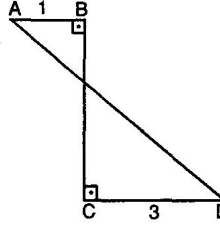


ACB bir dik üçgen
BCD bir eşkenar üçgen
 $|AD| = 3\sqrt{3}$ cm

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

- A) 9 B) 10 C) 12 D) 15 E) 16

13.



Düzlemsel şekilde

$|AB| \perp |BC|$

$|BC| \perp |CD|$

$|AB| = 1$ cm

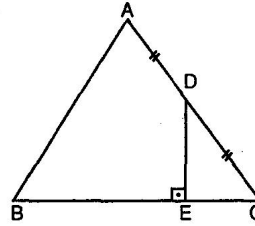
$|CD| = 3$ cm

$|BC| = 4$ cm

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

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

14.



ABC bir eşkenar üçgen

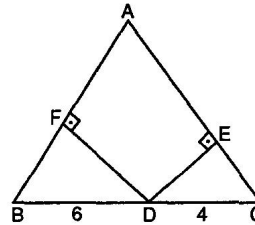
$|DE| \perp |BC|$

$|AD| = |DC|$

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

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

15.



ABC bir eşkenar
üçgen

$|DE| \perp |AC|$

$|DF| \perp |AB|$

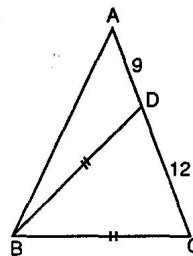
$|BD| = 6$ cm

$|DC| = 4$ cm

Yukarıdaki verilere göre, $|DE| + |DF|$ toplamı kaç cm dir?

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

16.



ABC bir üçgen

$|BC| = |BD| = 10$ cm

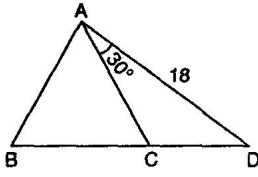
$|AD| = 9$ cm

$|DC| = 12$ cm

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

- A) 18 B) 17 C) 16 D) 15 E) 13

1.

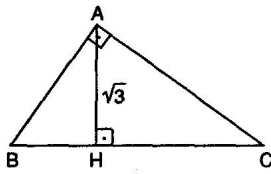


ABD bir üçgen
ABC bir eşkenar üçgen
 $m(\widehat{CAD}) = 30^\circ$
 $|AD| = 18$ cm

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

- A) 6 B) $6\sqrt{3}$ C) 12 D) $12\sqrt{3}$ E) 18

2.

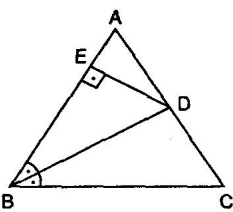


BAC bir dik üçgen
 $[AH] \perp [BC]$
 $|BC| = 4|BH|$
 $|AH| = \sqrt{3}$ cm

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

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

3.

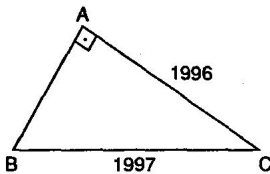


ABC bir eşkenar üçgen
 $[BD]$ açıortay
 $[DE] \perp [AB]$

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

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

4.

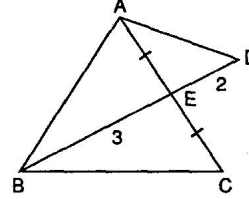


BAC bir dik üçgen
 $|AC| = 1996$ cm
 $|BC| = 1997$ cm

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

- A) 1995 B) $\sqrt{3993}$ C) $\sqrt{3893}$
D) $\sqrt{4993}$ E) $\sqrt{3983}$

5.

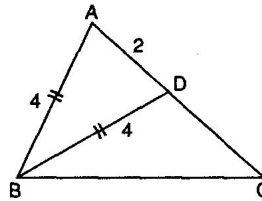


ABC bir eşkenar üçgen
 $|AE| = |EC|$
 $|BE| = 3$ cm
 $|ED| = 2$ cm

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

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

6.

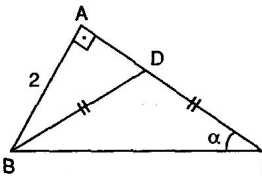


ABC bir ikizkenar üçgen
 $|AC| = |BC|$
 $|AB| = |BD| = 4$ cm
 $|AD| = 2$ cm

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

- A) 5 B) 6 C) 7 D) 8 E) 10

7.

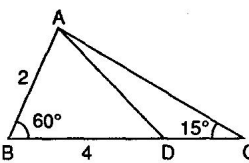


BAC bir dik üçgen
 $|BD| = |DC| = 2\sqrt{2}$ cm
 $|AB| = 2$ cm

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

- A) 15 B) 22,5 C) 30 D) 45 E) 60

8.

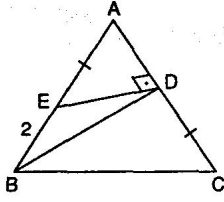


ABC bir üçgen
 $m(\widehat{ABC}) = 60^\circ$
 $m(\widehat{ACB}) = 15^\circ$
 $|BD| = 4$ cm
 $|AB| = 2$ cm

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

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

9.

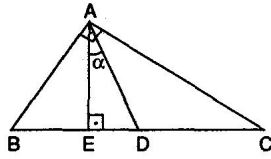


ABC bir eşkenar üçgen
ADE bir dik üçgen
 $|AE| = |DC|$
 $|BE| = 2$ cm

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

- A) $2\sqrt{3}$ B) $3\sqrt{3}$ C) $\sqrt{13}$ D) $4\sqrt{3}$ E) $2\sqrt{7}$

10.

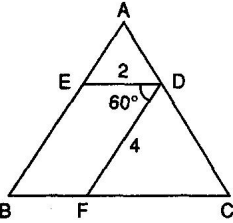


BAC bir dik üçgen
 $[AE] \perp [BC]$
 $|BD| = |DC| = 4$ cm
 $|AE| = 2$ cm

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

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

11.

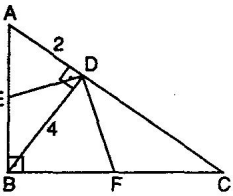


ABC bir ikizkenar üçgen
 $|AB| = |BC|$
 $[DE] \parallel [BC]$
 $[DF] \parallel [AB]$
 $m(\widehat{EDF}) = 60^\circ$
 $|DE| = 2$ cm
 $|DF| = 4$ cm

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

- A) 4 B) 6 C) 7 D) 8 E) 10

12.

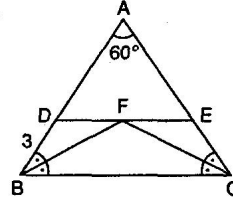


ABC bir dik üçgen
 $[BD] \perp [AC]$
 $|AE| = |EB|$
 $|BF| = |FC|$
 $|BD| = 4$ cm
 $|AD| = 2$ cm

Yukarıdaki verilere göre, $|DE|^2 + |DF|^2$ toplamı kaçtır?

- A) 9 B) 16 C) 25 D) 36 E) 45

13.

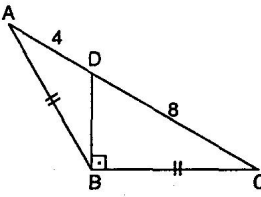


ABC bir üçgen
 $[BF]$ ve $[CF]$ açıortaylar
 $[DE] \parallel [BC]$
 $m(\widehat{BAC}) = 60^\circ$
 $|BD| = 3$ cm

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

- A) 6 B) 7,5 C) 9 D) 12 E) 15

14.

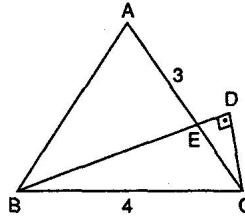


ABC bir
ikizkenar üçgen
 $|AB| = |BC|$
 $[DB] \perp [BC]$
 $|DC| = 8$ cm
 $|AD| = 4$ cm

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

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

15.

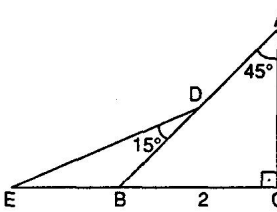


ABC bir
eşkenar üçgen
 $[BD] \perp [DC]$
 $|AE| = 3$ cm
 $|BC| = 4$ cm

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

- A) $\frac{1}{\sqrt{13}}$ B) $\frac{\sqrt{3}}{2}$ C) $\frac{1}{\sqrt{3}}$ D) $\sqrt{3}$ E) $\frac{2}{\sqrt{13}}$

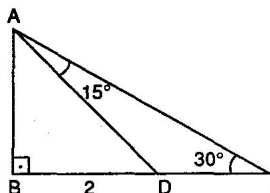
16.

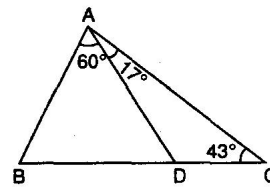


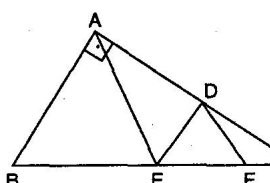
ACB bir dik üçgen
E, B, C doğrusal
 $m(\widehat{BDE}) = 15^\circ$
 $m(\widehat{BAC}) = 45^\circ$
 $|AD| = |DB|$
 $|BC| = 2$ cm

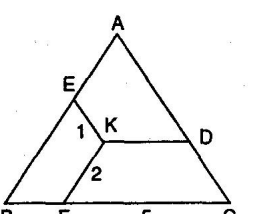
Yukarıdaki verilere göre, $|ED|$ kaç cm dir?

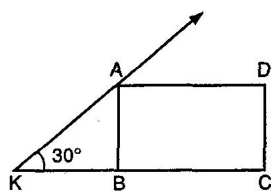
- A) $\sqrt{2}$ B) 2 C) $2\sqrt{2}$ D) $\sqrt{3}$ E) $2\sqrt{3}$

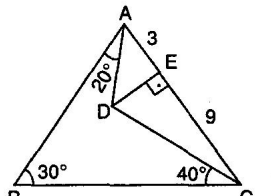
1.  ABC bir dik üçgen
 $m(\widehat{CAD}) = 15^\circ$
 $m(\widehat{ACB}) = 30^\circ$
 $|BD| = 2$ cm
- Yukarıdaki verilere göre, $|DC|$ kaç cm dir?
- A) $2\sqrt{3} - 2$ B) $2\sqrt{3}$ C) $2\sqrt{3} - 1$
D) $2\sqrt{2} - 1$ E) $2\sqrt{2}$

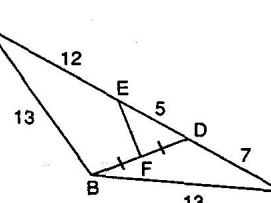
2.  ABC bir üçgen
 $m(\widehat{BAD}) = 60^\circ$
 $m(\widehat{DAC}) = 17^\circ$
 $m(\widehat{ACB}) = 43^\circ$
 $|AD| = 5$ cm
- Yukarıdaki verilere göre, ABD üçgeninin çevresi kaç cm dir?
- A) 9 B) 12 C) 15 D) 18 E) 25

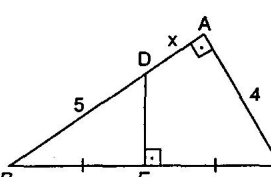
3.  BAC bir dik üçgen
ABE ve DEF birer eşkenar üçgen
- Yukarıdaki verilere göre, $\frac{|DC|}{|BE|}$ oranı kaçtır?
- A) $\frac{\sqrt{3}}{2}$ B) $\frac{1}{2}$ C) $\frac{1}{\sqrt{3}}$ D) $\frac{2}{3\sqrt{3}}$ E) $\frac{\sqrt{3}}{4}$

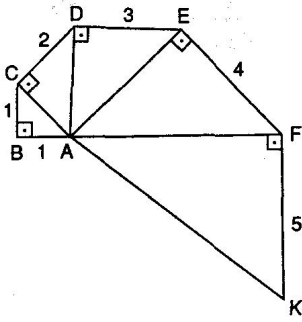
4.  ABC bir eşkenar üçgen
 $[KD] \parallel [BC]$
 $[EK] \parallel [AC]$
 $[KF] \parallel [AB]$
 $|EK| = 1$ cm
 $|KF| = 2$ cm
 $|FC| = 5$ cm
- Yukarıdaki verilere göre, $|AD|$ kaç cm dir?
- A) 1 B) 2 C) 3 D) 4 E) 5

5.  ABCD bir dikdörtgen
 $m(\widehat{AKC}) = 30^\circ$
 $|AD| = 2|AB|$
 $|KC| = 2$ cm
- Yukarıdaki verilere göre, $|AB|$ kaç cm dir?
- A) $\sqrt{3} - 1$ B) $2\sqrt{3} - 1$ C) $4\sqrt{3} - 2$
D) $4 - 2\sqrt{3}$ E) $4 - \sqrt{3}$

6.  ABC bir üçgen
 $[DE] \perp [AC]$
 $m(\widehat{ABC}) = 30^\circ$
 $m(\widehat{BCD}) = 40^\circ$
 $m(\widehat{BAD}) = 20^\circ$
 $|AE| = 3$ cm
 $|EC| = 9$ cm
- Yukarıdaki verilere göre, $|AD|$ kaç cm dir?
- A) $2\sqrt{3}$ B) $3\sqrt{3}$ C) $4\sqrt{3}$ D) 6 E) $\sqrt{30}$

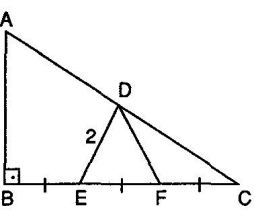
7.  ABC bir ikizkenar üçgen
 $|BF| = |FD|$
 $|AB| = |BC| = 13$ cm
 $|AE| = 12$ cm
 $|ED| = 5$ cm
 $|DC| = 7$ cm
- Yukarıdaki verilere göre, $|EF|$ kaç cm dir?
- A) $\frac{3}{\sqrt{2}}$ B) $2\sqrt{2}$ C) $\frac{5}{\sqrt{2}}$ D) $3\sqrt{2}$ E) $4\sqrt{2}$

8.  BAC bir dik üçgen
 $[DE] \perp [BC]$
 $|BE| = |EC|$
 $|BD| = 5$ cm
 $|AC| = 4$ cm
- Yukarıdaki verilere göre, $|AD| = x$ kaç cm dir?
- A) 1 B) 2 C) 3 D) 4 E) 5

9.  Düzlemsel şekilde ABC, ACD, ADE, AEF ve AFK birer dik üçgen
 $|AB| = |BC| = 1$ cm
 $|CD| = 2$ cm
 $|DE| = 3$ cm
 $|EF| = 4$ cm
 $|FK| = 5$ cm

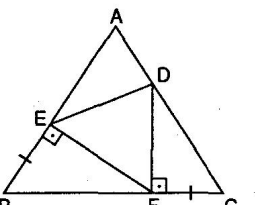
Yukarıdaki verilere göre, $|AK|$ kaç cm dir?

- A) $2\sqrt{14}$ B) $3\sqrt{5}$ C) 13 D) $5\sqrt{2}$ E) $5\sqrt{3}$

10.  ABC bir dik üçgen
DEF bir eşkenar üçgen
 $|BE| = |EF| = |FC|$
 $|DE| = 2$ cm

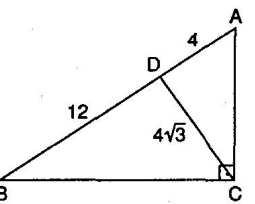
Yukarıdaki verilere göre, $|AD|$ kaç cm dir?

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

11.  ABC bir eşkenar üçgen
 $|FE| \perp |AB|$
 $|DF| \perp |BC|$
 $|BE| = |FC| = \sqrt{3}$ cm

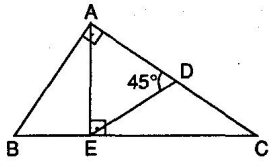
Yukarıdaki verilere göre, $|DE|$ kaç cm dir?

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

12.  ACB bir dik üçgen
 $|BD| = 12$ cm
 $|AD| = 4$ cm
 $|DC| = 4\sqrt{3}$ cm

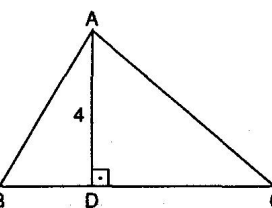
Yukarıdaki verilere göre, $|AC|$ kaç cm dir?

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

13.  BAC bir dik üçgen
 $|AE| \perp |BC|$
 $m(\widehat{ADE}) = 45^\circ$
 $|BE| = 4 - 2\sqrt{3}$ cm
 $|EC| = 4 + 2\sqrt{3}$ cm

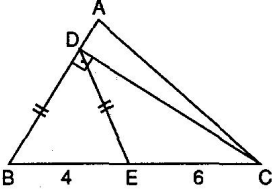
Yukarıdaki verilere göre, $|AD|$ kaç cm dir?

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

14.  ABC bir ikizkenar üçgen
 $|AC| = |BC|$
 $|AD| \perp |BC|$
 $|AD| = 4$ cm
 $|BD| = 2$ cm

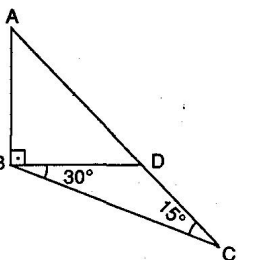
Yukarıdaki verilere göre, $|AC|$ kaç cm dir?

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

15.  ABC bir üçgen
 $|CD| \perp |AB|$
 $|BD| = |DE|$
 $|BE| = 4$ cm
 $|AD| = 1$ cm
 $|EC| = 6$ cm

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

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

16.  ABC bir üçgen
 $|AB| \perp |BD|$
 $m(\widehat{DBC}) = 30^\circ$
 $m(\widehat{ACB}) = 15^\circ$
 $|AB| = 2\sqrt{2}$ cm

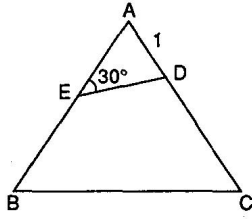
Yukarıdaki verilere göre, $|DC|$ kaç cm dir?

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

DİK ve ÖZEL ÜÇGENLER

Konu Uygulama Testi - 3

1.

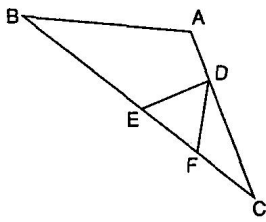


ABC bir eşkenar üçgen
 $m(\widehat{AED}) = 30^\circ$
 $|BE| = 2|AE|$
 $|AD| = 1$ cm

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

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

2.

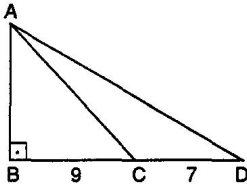


ABC bir ikizkenar üçgen
 DEF bir eşkenar üçgen
 $|AB| = |AC|$
 $|DE| = |FC|$
 $|IEFI| = 2$ cm
 $|AD| = \sqrt{3}$ cm

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

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

3.

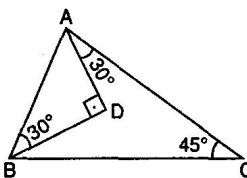


ABD bir dik üçgen
 $|AC| = 15$ cm
 $|BC| = 9$ cm
 $|CD| = 7$ cm

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

- A) 20 B) 25 C) 30 D) 17 E) 18

4.

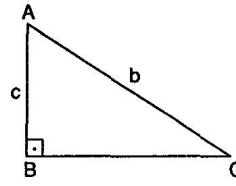


ABC bir üçgen
 $|AD| \perp |DB|$
 $m(\widehat{ABD}) = m(\widehat{DAC}) = 30^\circ$
 $m(\widehat{ACB}) = 45^\circ$

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

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

5.

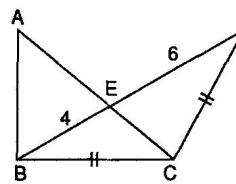


ABC bir dik üçgen
 $|AC| = b$
 $|AB| = c$
 $b^2 = c^2 + 13$

Yukarıdaki şekilde b ve c tamsayı olduklarına göre, $|BC|$ kaç cm dir?

- A) $2\sqrt{3}$ B) 3 C) 4 D) 12 E) $\sqrt{13}$

6.

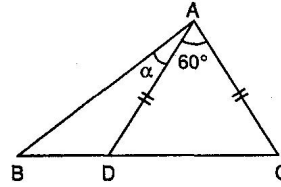


ABC ve BCD birer üçgen
 $|AE| = 2|EC|$
 $|BC| = |CD| = 2\sqrt{7}$ cm
 $|BE| = 4$ cm
 $|ED| = 6$ cm

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

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

7.

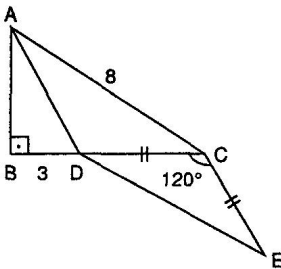


ABC bir üçgen
 $m(\widehat{DAC}) = 60^\circ$
 $|AD| = |AC| = 4$ cm
 $|AB| = 4\sqrt{3}$ cm

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

- A) 10 B) 15 C) 30 D) 45 E) 50

8.

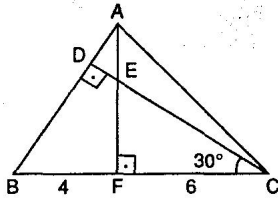


ABC bir dik üçgen
 $m(\widehat{ECD}) = 120^\circ$
 $|CD| = |CE|$
 $|BDI| = 3$ cm
 $|ADI| = 5$ cm
 $|ACI| = 8$ cm

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

- A) $12 - \sqrt{3}$ B) $12 - 2\sqrt{3}$ C) $12 - 2\sqrt{2}$
 D) $16 - 3\sqrt{3}$ E) $12 - 3\sqrt{3}$

9.

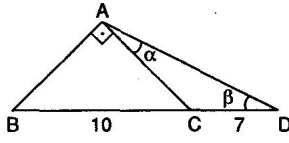


ABC bir üçgen
 $[AF] \perp [BC]$
 $[CD] \perp [AB]$
 $m(\widehat{BCD}) = 30^\circ$
 $|BF| = 4 \text{ cm}$
 $|FC| = 6 \text{ cm}$

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

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

10.

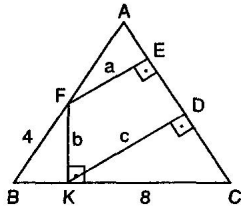


ABD bir üçgen
 $[CA] \perp [AB]$
 $\alpha + \beta = 45^\circ$
 $|BC| = 10 \text{ cm}$
 $|CD| = 7 \text{ cm}$

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

- A) 25 B) 20 C) 16 D) 15 E) 13

11.

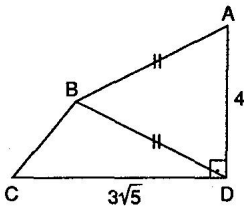


ABC bir eşkenar üçgen
 $[FE] \perp [AC]$
 $[KD] \perp [AC]$
 $[FK] \perp [BC]$
 $|BF| = 4 \text{ cm}$
 $|KC| = 8 \text{ cm}$

Yukarıdaki verilere göre, $a + b + c$ toplamı kaç cm dir?

- A) $8\sqrt{3}$ B) $9\sqrt{3}$ C) $10\sqrt{3}$
D) $11\sqrt{3}$ E) $12\sqrt{3}$

12.

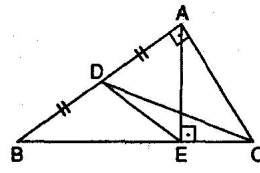


Düzlemsel şekilde
 $[AD] \perp [DC]$
 $|AD| = 4 \text{ cm}$
 $|AB| = |BD| = 2\sqrt{6} \text{ cm}$
 $|CD| = 3\sqrt{5} \text{ cm}$

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

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

13.

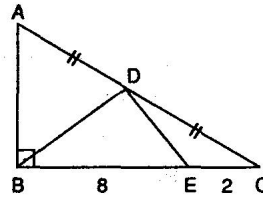


BAC bir dik üçgen
 $[AE] \perp [BC]$
 $|AD| = |DB| = |AE| = 2 \text{ cm}$

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

- A) $\frac{2\sqrt{21}}{3}$ B) $\sqrt{21}$ C) $\frac{4\sqrt{21}}{3}$
D) $\frac{5\sqrt{21}}{3}$ E) $2\sqrt{21}$

14.

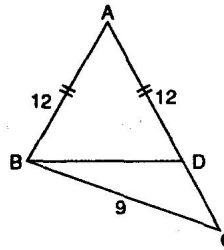


ABC bir dik üçgen
 $|AD| = |DC|$
 $|AB| = |DE|$
 $|BE| = 8 \text{ cm}$
 $|EC| = 2 \text{ cm}$

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

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

15.

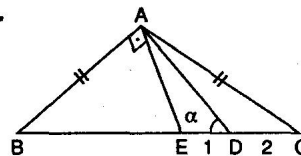


ABC bir üçgen
 $m(\widehat{BAC}) = 2m(\widehat{DBC})$
 $|AB| = |AD| = 12 \text{ cm}$
 $|BC| = 9 \text{ cm}$

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

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

16.



ABC bir ikizkenar üçgen
 $[EA] \perp [AB]$
 $|AB| = |AC|$
 $|BE| = 5 \text{ cm}$
 $|ED| = 1 \text{ cm}$
 $|DC| = 2 \text{ cm}$

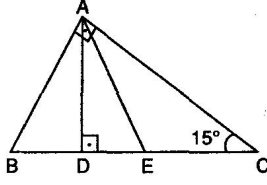
Yukarıdaki verilere göre, $m(\widehat{ADB}) = \alpha$ kaç derecedir?

- A) 30 B) 45 C) 53 D) 60 E) 75

DİK ve ÖZEL ÜÇGENLER

Konu Uygulama Testi - 4

1.



BAC bir dik üçgen

$[AD] \perp [BC]$

$m(\widehat{C}) = 15^\circ$

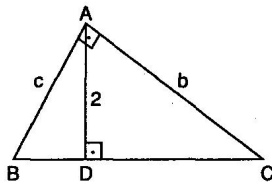
$|BE| = |EC|$

$|AD| = 6 \text{ cm}$

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

- A) 6 B) 9 C) 12 D) $6\sqrt{3}$ E) 15

2.



BAC bir dik üçgen

$[AD] \perp [BC]$

$|AB| = c$

$|AC| = b$

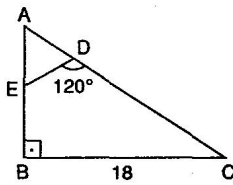
$|AD| = 2 \text{ cm}$

$|BC| = 10 \text{ cm}$

Yukarıdaki verilere göre, $\frac{b^2 + c^2}{b \cdot c}$ oranı kaçtır?

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

3.



ABC bir dik üçgen

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

$|AD| = |DE|$

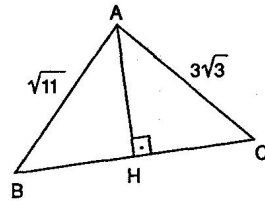
$|BE| = 2|AE|$

$|BC| = 18 \text{ cm}$

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

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

4.



ABC bir üçgen

$[AH] \perp [BC]$

$|AB| = \sqrt{11} \text{ cm}$

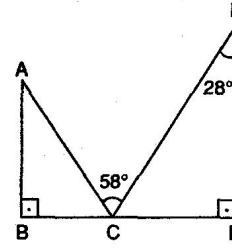
$|AC| = 3\sqrt{3} \text{ cm}$

$|BC| = 8 \text{ cm}$

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

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

5.



Düzlemsel şekilde

ABC ve CDE birer dik üçgen

B, C, D doğrusal

$m(\widehat{ACE}) = 58^\circ$

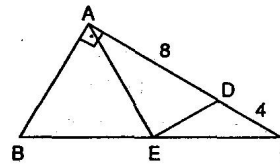
$m(\widehat{CED}) = 28^\circ$

$|BC| = \sqrt{3} \text{ cm}$

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

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

6.



BAC bir

dik üçgen

ABE bir

eşkenar üçgen

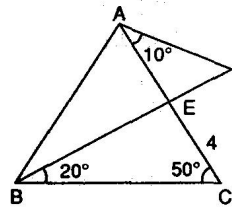
$|AD| = 8 \text{ cm}$

$|DC| = 4 \text{ cm}$

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

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

7.



ABC ve ABD

birer üçgen

$|AB| = |AC|$

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

$m(\widehat{ACB}) = 50^\circ$

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

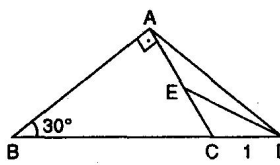
$|EC| = 4 \text{ cm}$

$|AE| = 2 \text{ cm}$

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

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

8.



ABD bir üçgen

$[BA] \perp [AC]$

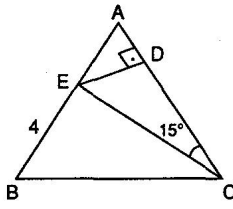
$m(\widehat{ABD}) = m(\widehat{EDB}) = 30^\circ$

$|AE| = |CD| = 1 \text{ cm}$

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

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

9.

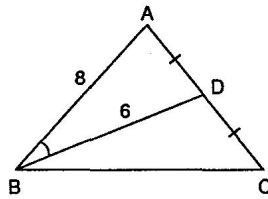


ABC bir eşkenar üçgen
 $[ED] \perp [AC]$
 $m(\widehat{ACE}) = 15^\circ$
 $|EB| = 4$ cm

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

- A) $\sqrt{3}$ B) $\sqrt{3} - 1$ C) 1
 D) $\sqrt{2} - 1$ E) $\sqrt{5} - 2$

10.

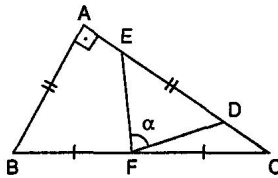


ABC bir üçgen
 $|AD| = |DC|$
 $m(\widehat{ABD}) = 60^\circ$
 $|AB| = 8$ cm
 $|BD| = 6$ cm

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

- A) 3 B) $2\sqrt{13}$ C) $\sqrt{11}$ D) $\sqrt{13}$ E) $4\sqrt{13}$

11.

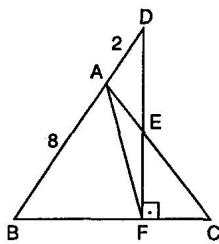


BAC bir dik üçgen
 $|BF| = |FC|$
 $|AB| = |DE|$
 $|AE| = |DC|$

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

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

12.

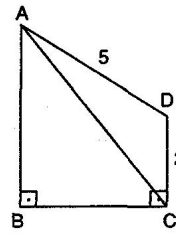


Düzlemsel şekilde
 ABC bir eşkenar üçgen
 BFD bir dik üçgen
 $|AD| = 2$ cm
 $|AB| = 8$ cm

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

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

13.



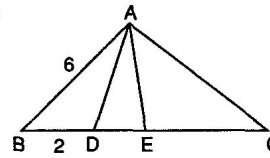
Düzlemsel şekilde

$[AB] \perp [BC]$
 $[DC] \perp [CB]$
 $|AC| = 3\sqrt{5}$ cm
 $|AD| = 5$ cm
 $|DC| = 2$ cm

Yukarıdaki verilere göre, $|AB| + |BC|$ toplamı kaç cm dir?

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

14.

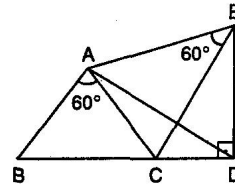


ABC bir üçgen
 $m(\widehat{C}) = 2m(\widehat{BAD})$
 $|BE| = |EC|$
 $|AC| = |DC|$
 $|AB| = 6$ cm
 $|BD| = 2$ cm

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

- A) 5 B) 6 C) 8 D) 10 E) 12

15.



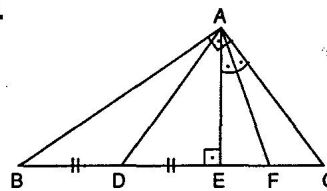
Düzlemsel şekilde

B, C, D doğrusal
 $[ED] \perp [DB]$
 $m(\widehat{AEC}) = m(\widehat{BAC}) = 60^\circ$
 $|AE| = |EC| = |BC| = 2$ cm

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

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

16.

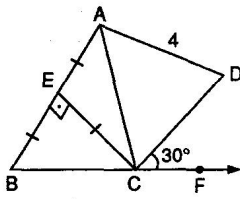


BAC bir
 dik üçgen
 $[AF]$, açıortay
 $[AE] \perp [BC]$
 $|BD| = |DE|$
 $|AE| = 3$ cm
 $|EF| = 1$ cm

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

- A) $2\sqrt{3}$ B) $3\sqrt{3}$ C) $\sqrt{13}$ D) 6 E) $\sqrt{10}$

1.

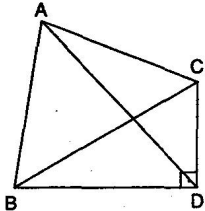


ABC ve ACD birer üçgen
B, C, F doğrusal
 $[CE] \perp [AB]$
 $m(\widehat{DCF}) = 30^\circ$
 $|AE| = |EB| = |EC| = 2\sqrt{2} \text{ cm}$
 $|AD| = 4 \text{ cm}$

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

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

2.

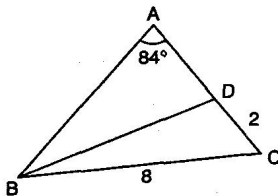


Düzlemsel şekilde
ABC bir eşkenar üçgen
 $[CD] \perp [DB]$
 $|AC| = 6 \text{ cm}$
 $|CD| = 3 \text{ cm}$

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

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

3.

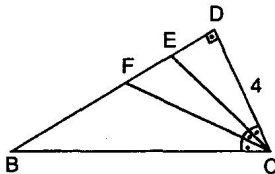


ABC bir üçgen
 $m(\widehat{BAC}) = 84^\circ$
 $m(\widehat{ABC}) = 36^\circ$
 $|DC| = 2 \text{ cm}$
 $|BC| = 8 \text{ cm}$

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

A) $5\sqrt{2}$ B) $3\sqrt{6}$ C) $2\sqrt{15}$ D) 8 E) $2\sqrt{13}$

4.

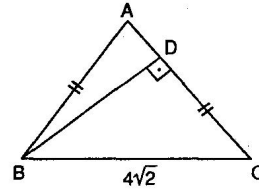


BDC bir dik üçgen
 $|BF| = |FC|$
 $|DC| = 4 \text{ cm}$

Yukarıdaki şekilde işaretli açılar eşit olduğuna göre, $|BF|$ kaç cm dir?

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

5.

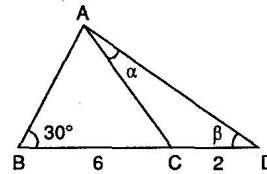


ABC bir üçgen
 $[BD] \perp [AC]$
 $|AD| = 3\sqrt{2}$ cm
 $|BC| = 4\sqrt{2}$ cm

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

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

6.

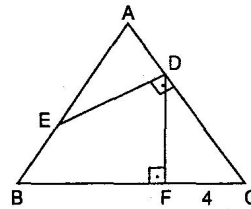


ABD bir üçgen
 $m(\widehat{ABD}) = 30^\circ$
 $\alpha = 30^\circ - \beta$
 $|BC| = 6 \text{ cm}$
 $|CD| = 2 \text{ cm}$

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

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

7.

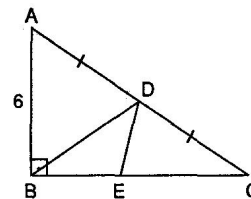


ABC bir eşkenar üçgen
 $[ED] \perp [AC]$
 $[DF] \perp [BC]$
 $|ED| = 2\sqrt{3}$ cm
 $|FC| = 4$ cm

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

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

8.

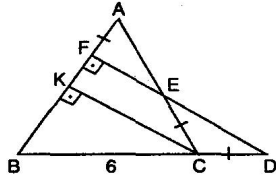


ABC bir dik üçgen
 $|BE| = |ED| = \frac{|EC|}{2}$
 $|AD| = |DC|$
 $|AB| = 6 \text{ cm}$

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

A) 3 B) $\sqrt{13}$ C) $2\sqrt{3}$ D) $3\sqrt{2}$ E) 4

9.

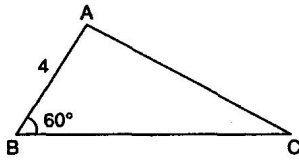


ABC bir eşkenar üçgen
BFD bir dik üçgen
 $[CK] \perp [AB]$
 $|AF| = |EC| = |CD|$
 $|BC| = 6$ cm

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

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

10.

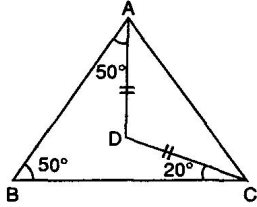


ABC bir üçgen
 $m(\hat{A}) = 7 m(\hat{C})$
 $m(\hat{ABC}) = 60^\circ$
 $|AB| = 4$ cm

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

- A) $4(2 + \sqrt{3})$ B) $3(2 + \sqrt{3})$ C) $4\sqrt{2} + \sqrt{3}$
D) $8 + \sqrt{3}$ E) $8 + 2\sqrt{3}$

11.

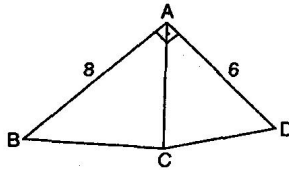


ABC bir üçgen
 $m(\hat{ABC}) = 50^\circ$
 $m(\hat{BAD}) = 50^\circ$
 $m(\hat{BCD}) = 20^\circ$
 $|AB| = 2\sqrt{3}$ cm

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

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

12.

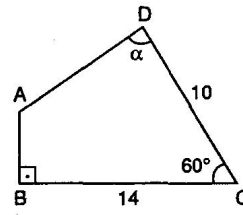


Düzlemsel şekilde
 $[BA] \perp [AD]$
 $|AB| = 8$ cm
 $|AD| = 6$ cm
 $|AC| = |CD| = 5$ cm

Yukarıdaki verilere göre, $m(\hat{BCD})$ kaç derecedir?

- A) 108 B) 120 C) 136 D) 150 E) 180

13.



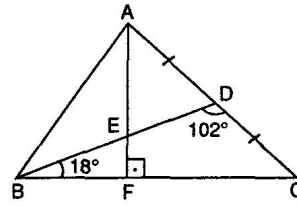
Düzlemsel şekilde
 $[AB] \perp [BC]$

$m(\hat{BCD}) = 60^\circ$
 $|AB| = 2\sqrt{3}$ cm
 $|BC| = 14$ cm
 $|DC| = 10$ cm

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

- A) 45 B) 60 C) 75 D) 90 E) 120

14.



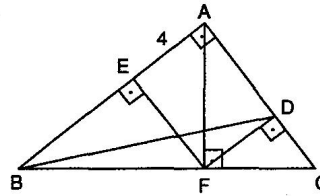
ABC bir üçgen

$[AF] \perp [BC]$
 $m(\hat{BDC}) = 102^\circ$
 $m(\hat{DBC}) = 18^\circ$
 $|BE| = |ED|$
 $|AD| = |DC|$
 $|EF| = 2\sqrt{3}$ cm

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

- A) 4 B) $4\sqrt{3}$ C) 8 D) $8\sqrt{3}$ E) 16

15.



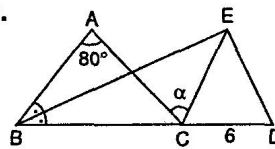
BAC bir dik üçgen

$[AF] \perp [BC]$
 $[FE] \perp [AB]$
 $[FD] \perp [AC]$
 $|AE| = 4$ cm
 $|DC| = \frac{8}{\sqrt{3}}$ cm

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

- A) $3\sqrt{6}$ B) $\sqrt{59}$ C) $\sqrt{61}$ D) 8 E) $3\sqrt{7}$

16.



Düzlemsel şekilde
CDE bir eşkenar üçgen
B, C, D doğrusal

$[BE]$, açıortay
 $m(\hat{BAC}) = 80^\circ$
 $|CD| = 6$ cm
 $|BC| = 6 + 6\sqrt{3}$ cm

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

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