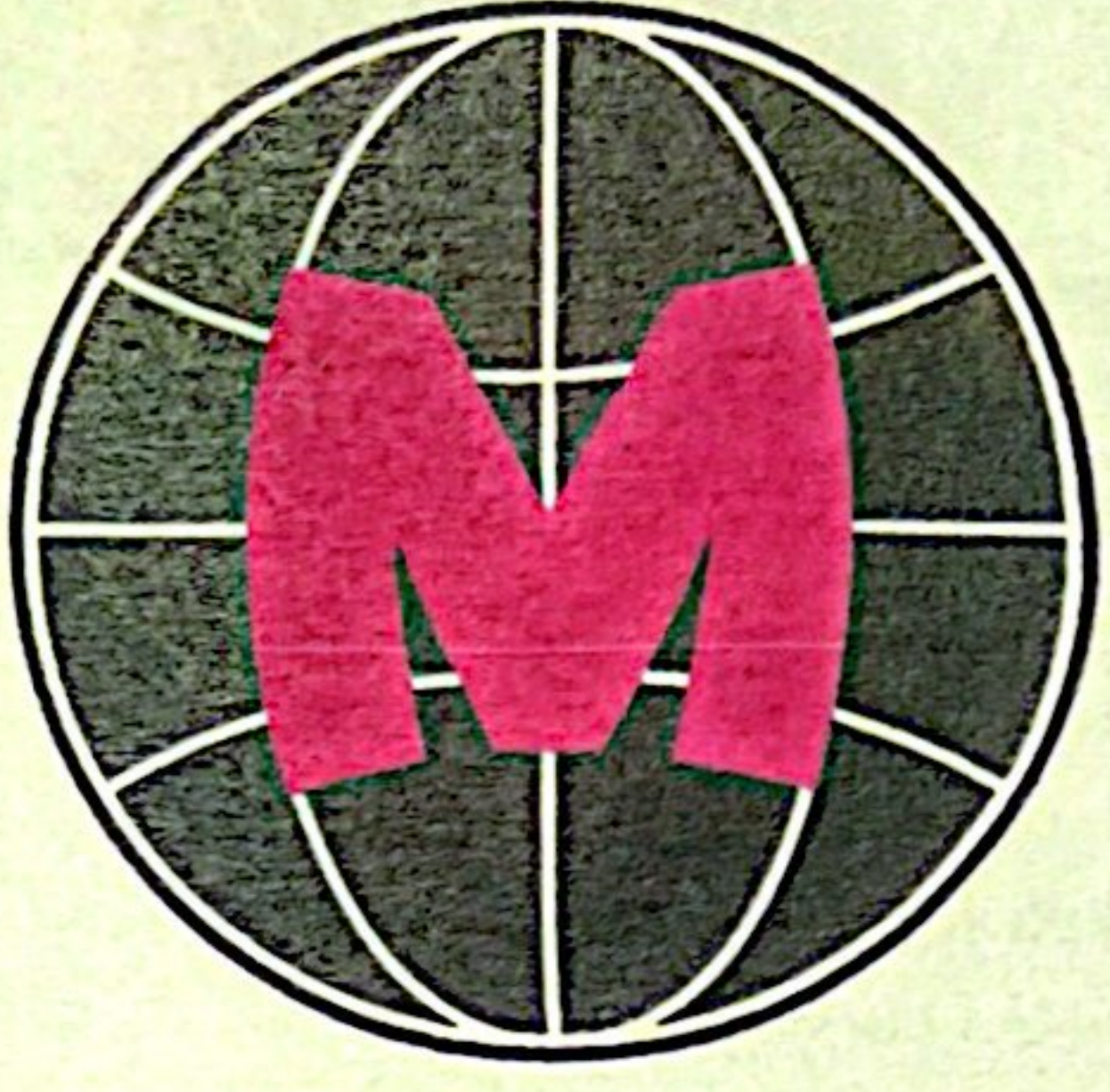




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4

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1 - 5. sorularda I. adımdaki her bir harf, rakam veya şekil, II. adımdaki veya şıklardaki farklı birer harf, rakam veya şekil ile gösterilmiştir. Buna göre, soru işaretiyle belirtilen harfleri, rakamları veya şekilleri bulunuz.

In questions 1 - 5, each letter, number and figure in step I is shown by a different letter, number and figure in step II or the choices. Accordingly, find the letters, digits or figures indicated by the question mark.

1. I. K E K
Ş E Ş
T A T
Ş A Ş
Z E Z
II. L İ L
K O K
M İ M
L O L
N O N
⇒ LOL = ?

- A) ZEZ B) TAT C) ŞAŞ
D) ŞEŞ E) KEK

3. I. 3 2 9 0
0 3 7 6
4 2 1 9
9 0 6 7
0 8 5 7
II. $\Rightarrow \blacksquare \blacktriangle / 87 = ?$

- A) 572 $\blacksquare +$ B) 725 $\blacksquare \oplus$ C) 752 $\oplus \blacksquare$
D) 752 $+ \bullet$ E) 752 $+ \blacksquare$

4. I. G A M Z E
Z G L K A
E T G Y L
M A L E A
II. ?

- A)

5	4	3	2	1
4	0	7	9	2
8	5	3	7	6
3	4	8	1	4

 B)

5	4	3	2	1
1	7	8	9	0
2	9	0	3	1
3	4	8	1	4

C)

5	4	3	2	1
2	0	4	8	6
4	0	7	9	2
3	4	8	1	4

 D)

5	4	3	2	1
2	5	8	6	4
1	7	5	9	8
3	4	8	1	4

E)

5	4	3	2	1
2	5	8	7	3
1	0	5	9	2
3	4	8	1	4

2. I. $\blacksquare * \times$
 $\blacktriangle \blacksquare \cdot$
 $\bullet * \blacktriangle$
 $\cdot \blacktriangle \times$
 $\bullet * \blacksquare$
II. $\nabla \heartsuit \circ$
 $\square \square \boxtimes$
 $\circ \heartsuit \boxtimes$
 $\square \circ \square$
 $\nabla \heartsuit \square$
⇒ $* \square \bullet \boxtimes = ?$

- A) $\heartsuit \nabla \blacksquare$ B) $\circ \times \heartsuit$ C) $\times * \blacktriangle \heartsuit$
D) $\heartsuit \nabla \times$ E) $\heartsuit \nabla \times$

5.

I.

RASİT
TEPKİ
RESET
TESİR
TESTİ

 $\Rightarrow \text{TEPKİ} = ?$

A) 38219

B) 38597

C) 38539

D) 78583

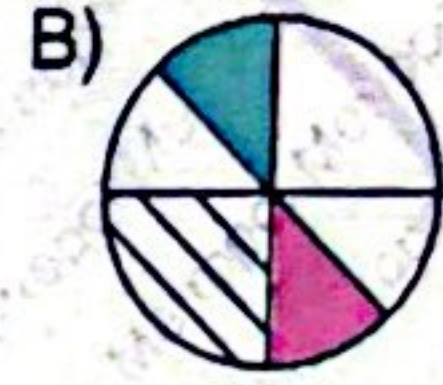
E) 74593

II.

7.

I. $2 \rightarrow S$ II. $R \rightarrow B$

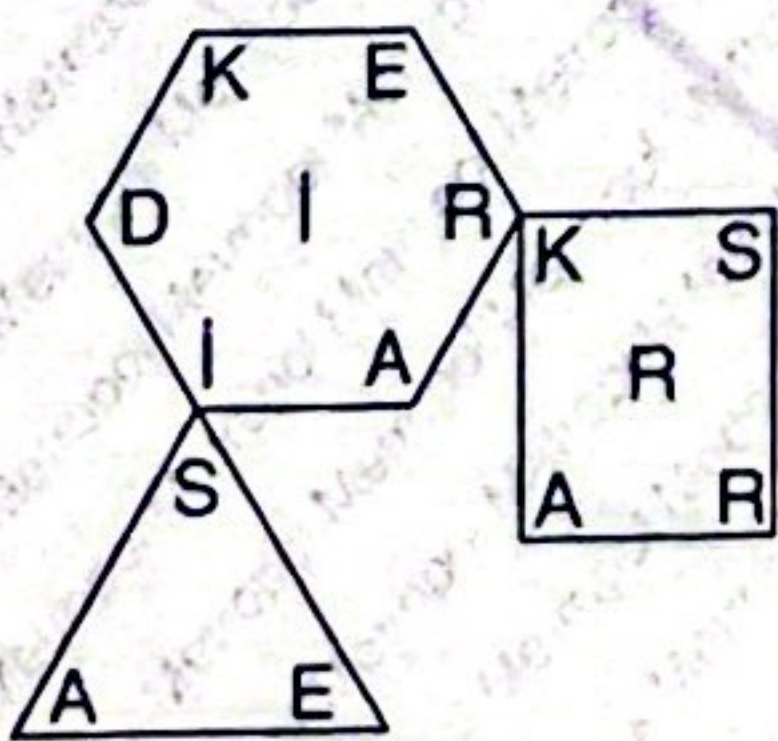
III.  $\xrightarrow{\text{pink square}} x \xrightarrow{\text{green circle}} y$

 $\Rightarrow y = ?$


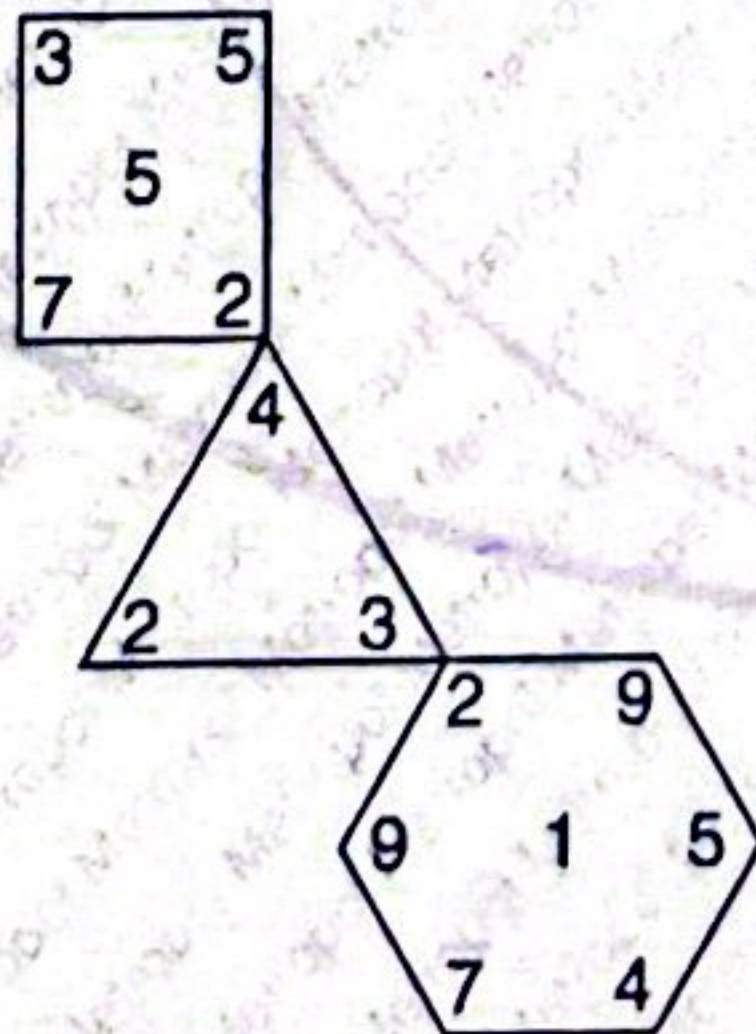
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6.

I.



II.


 $\Rightarrow \text{KARİDES} = ?$

A) 7259143

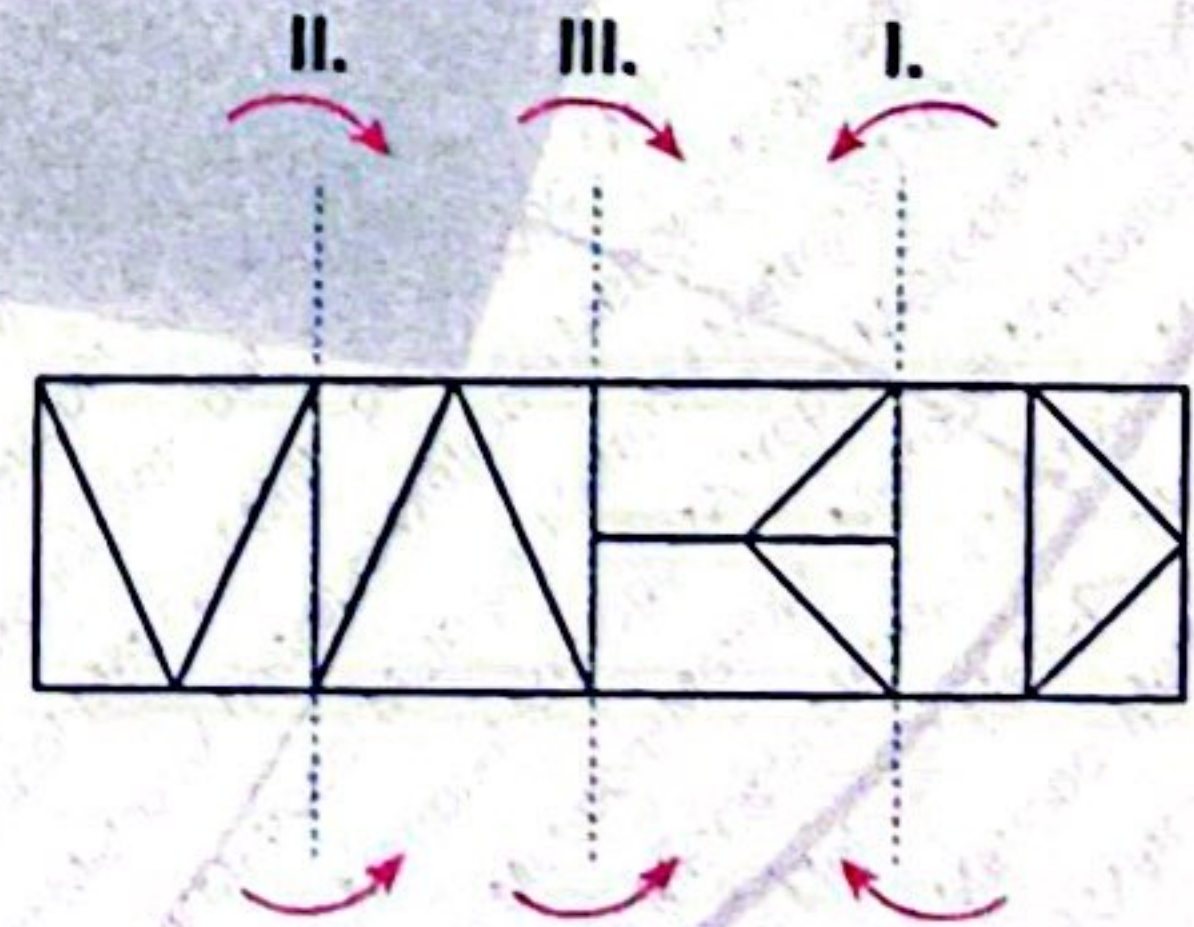
B) 7259134

C) 7251943

D) 7295134

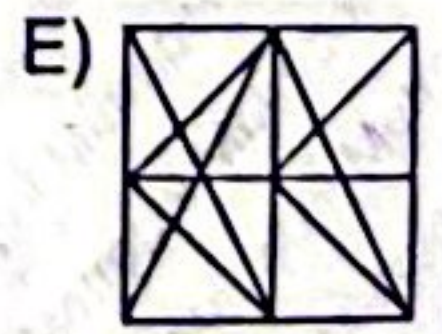
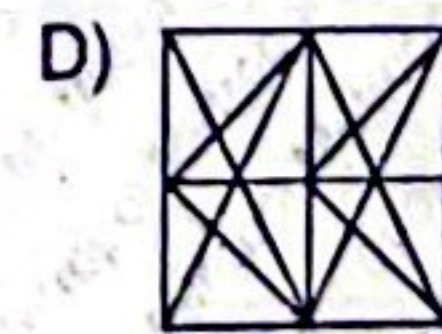
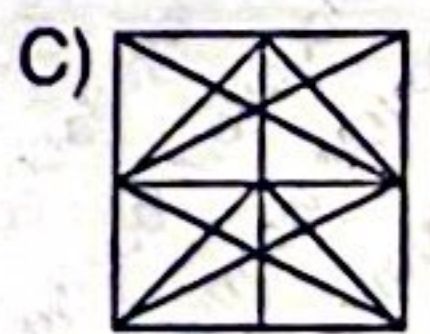
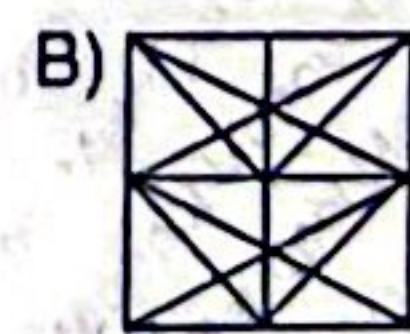
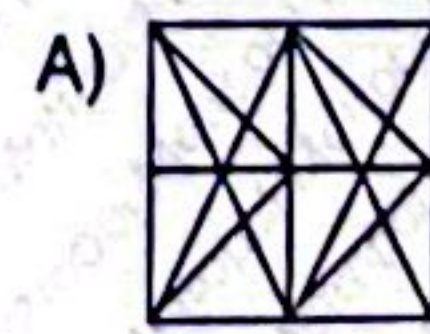
E) 7259413

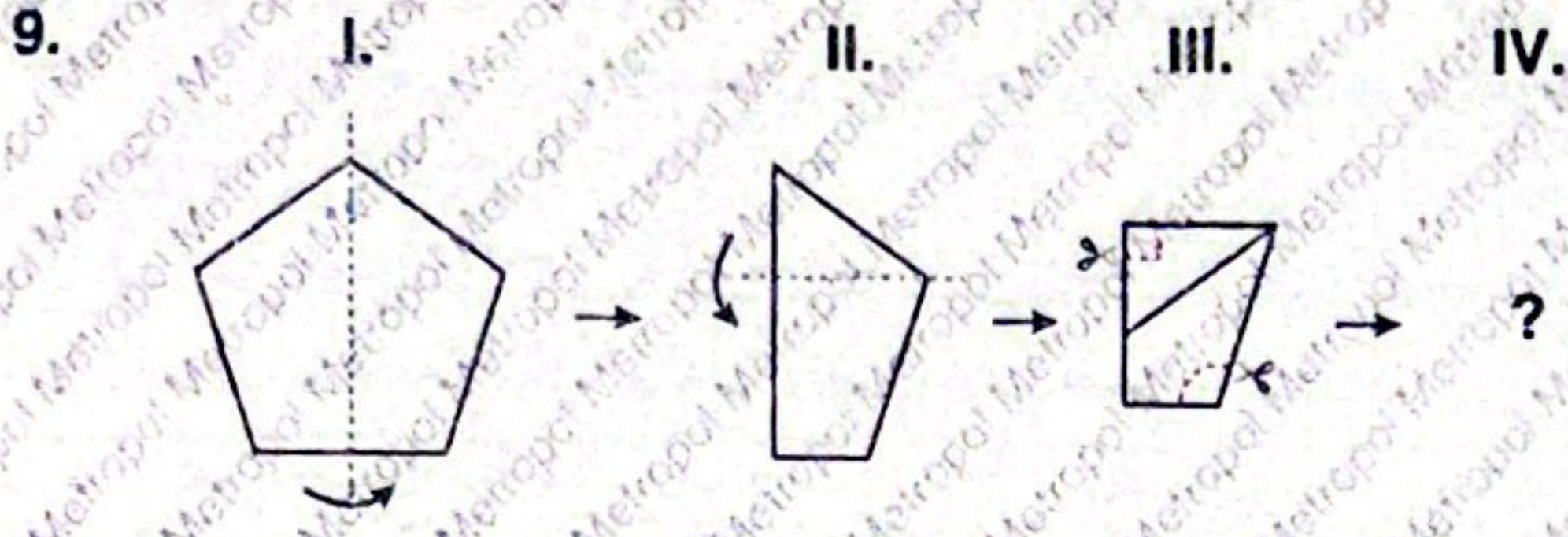
8.



Yukarıdaki şekil sırasıyla önce I, II ve en son III ekseninden ok işareti yönünde katlandığında aşağıdaki şekillerden hangisi elde edilir?

If the given figure folded I axis, II axis and at the end III axis, which of the following figure is formed?

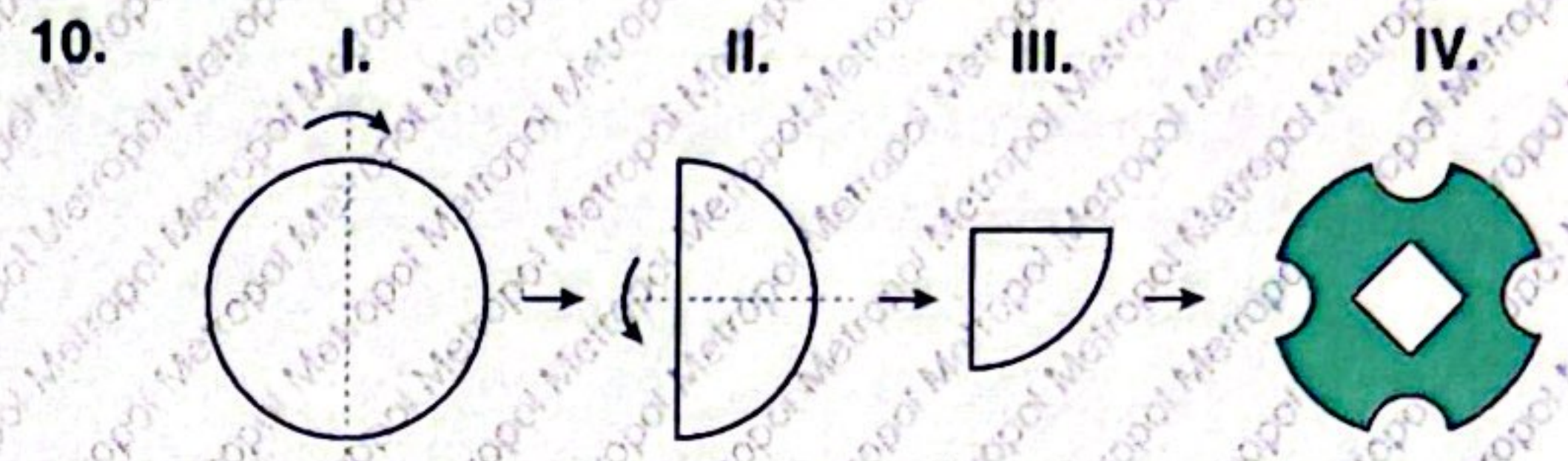
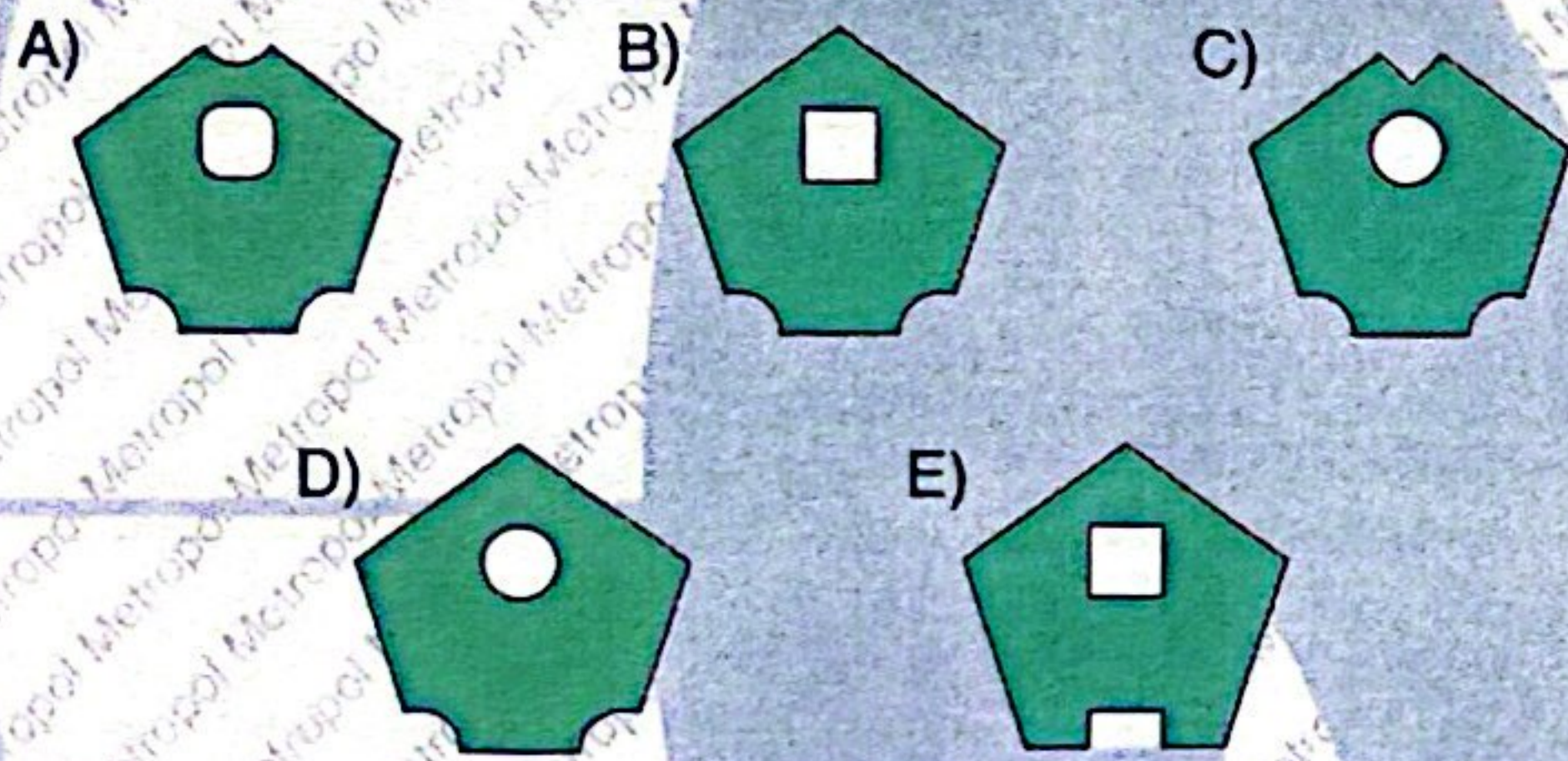




Yukarıdaki I. adımda verilen şekil, belirtilen eksenlerden adım adım katlanarak III. adımdaki şekil elde ediliyor ve ardından işaretli bölgelerden kesiliyor. Buna göre, III. adımdaki şekilde kesilen parçalar çıkartıldıktan sonra, şeklin konumu değiştirilmeden katlandığı eksenlerden açık hale getirilirse aşağıdaki şekillerden hangisi oluşur?

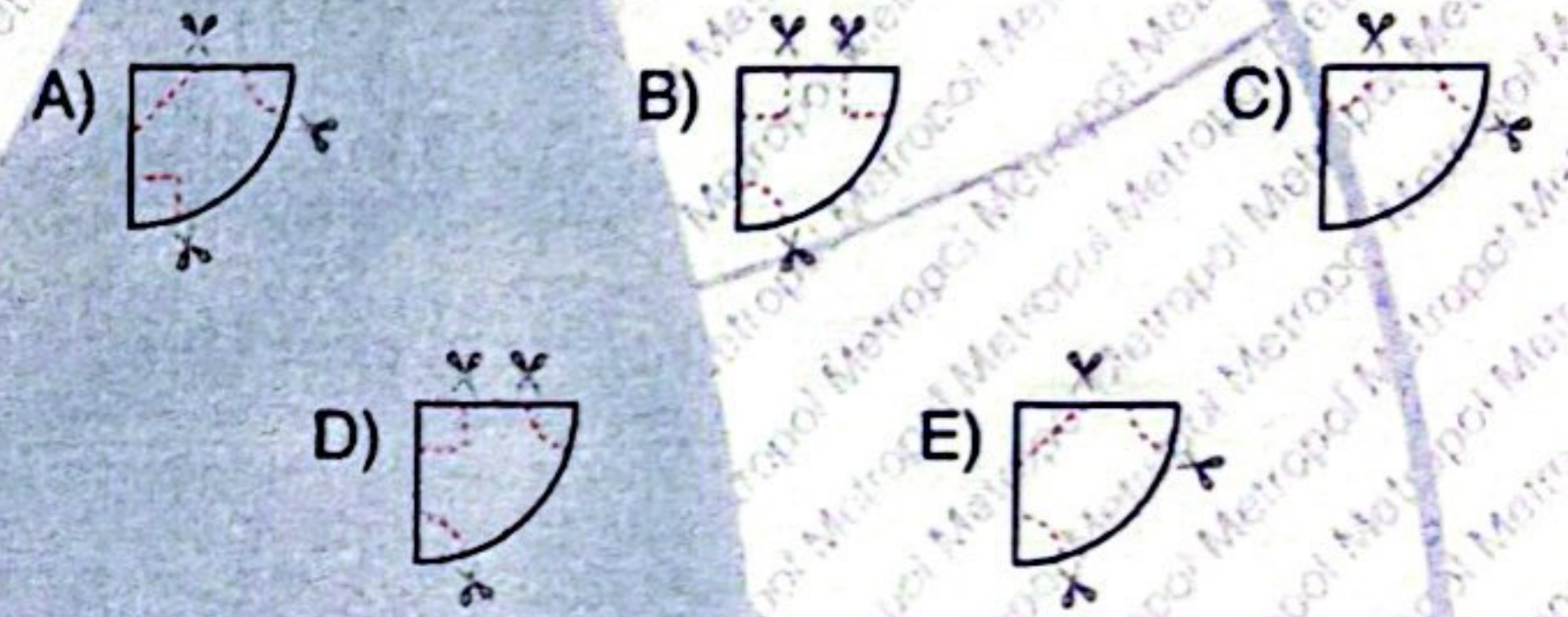
The given figure in step I is folded about the outlined axes step by step and forms the figure given in step III. Afterwards, it is cut over the marked areas.

Accordingly, if the figure in step III is unfolded without changing its position about the folded axes, after taking out the cut pieces, which of the following figures is obtained?



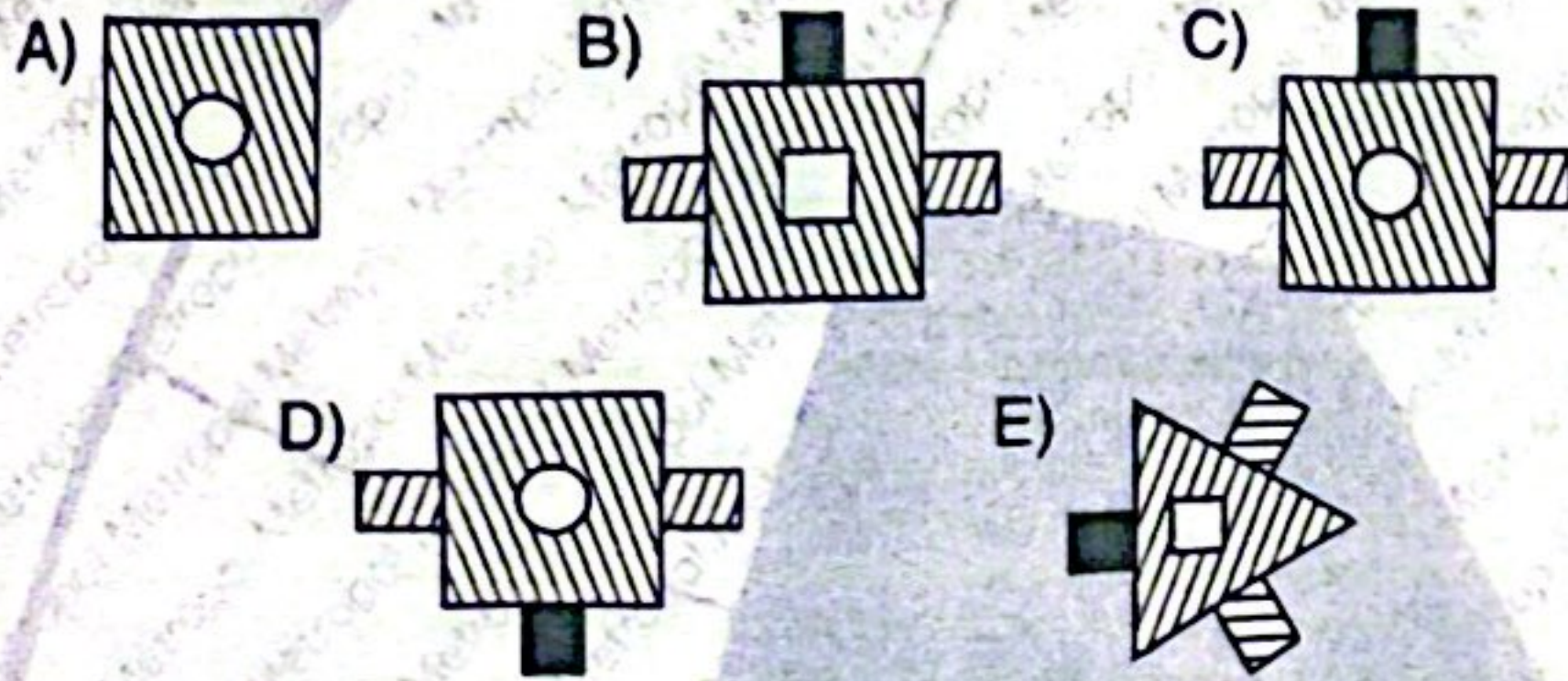
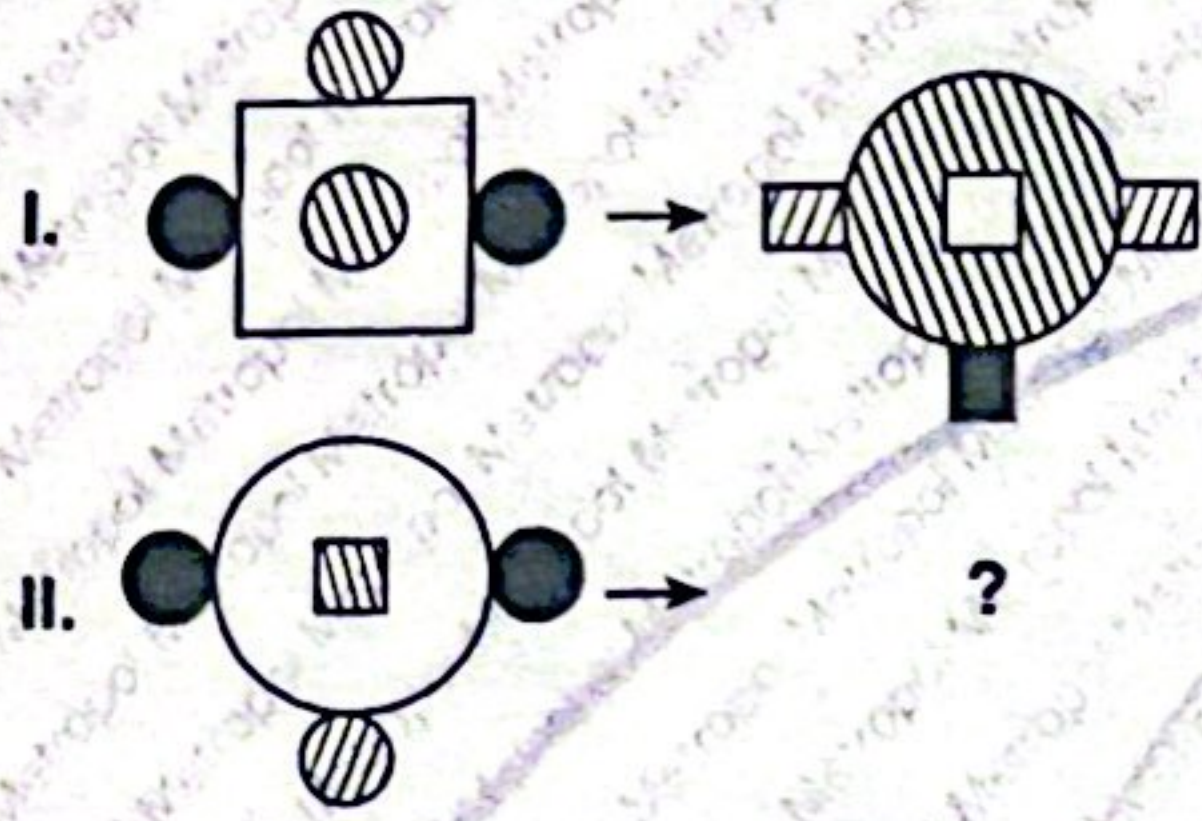
I. adımda verilen şekil katlanarak III. adımdaki şekil elde ediliyor, ardından III. adımdaki şekil makas ile bir doğrultu boyunca kesiliyor. Kesilen parçalar atıldıktan sonra şekil tekrar açıldığında IV. adımdaki şekil elde ediliyor. Buna göre şeklin kesim biçimini bulunuz.

The given figure in step I is folded and forms the figure given in step III. Afterwards, it is cut over the marked areas by scissors. After taking out the cut pieces, the figure in step IV is obtained. Accordingly, find the cut shape of the figure.

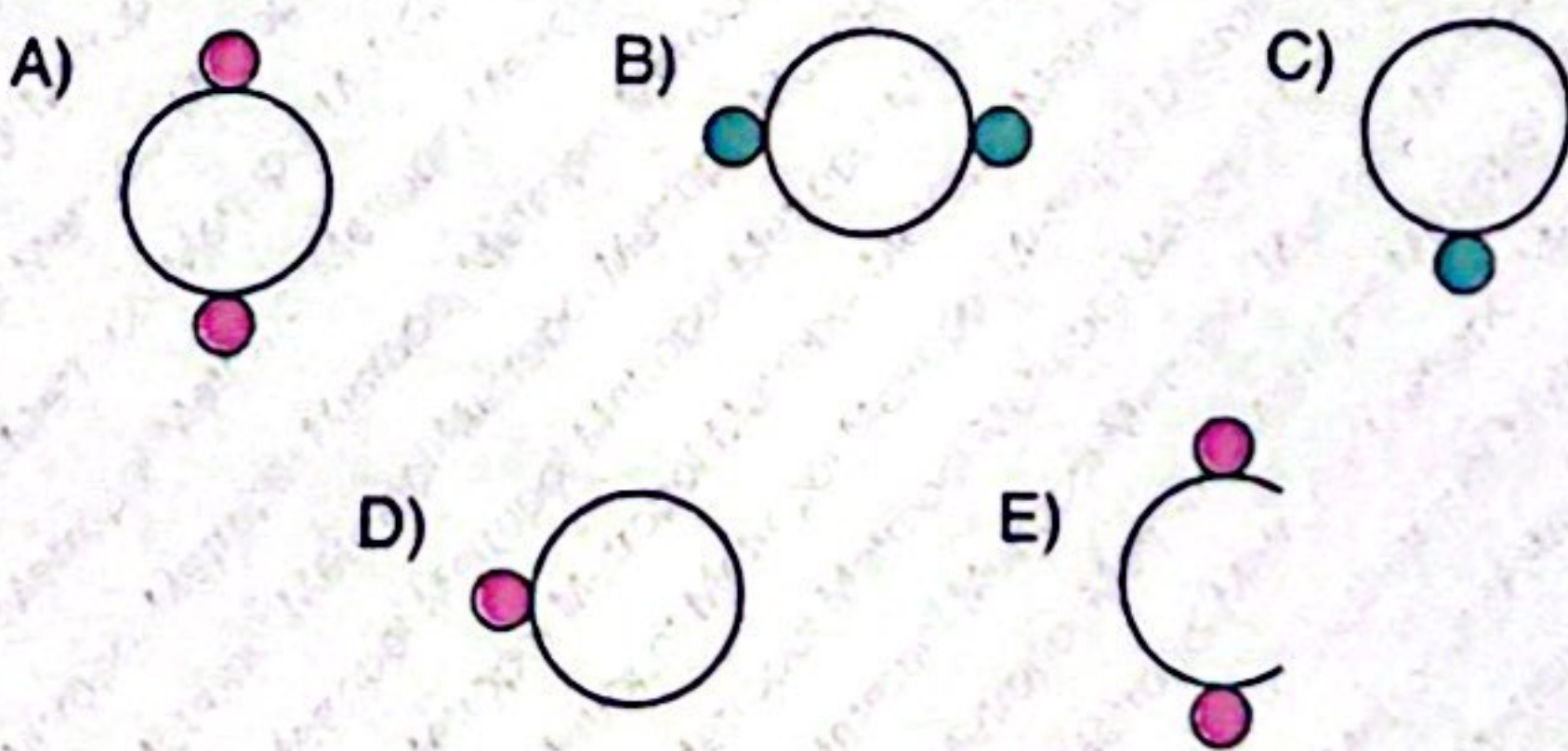
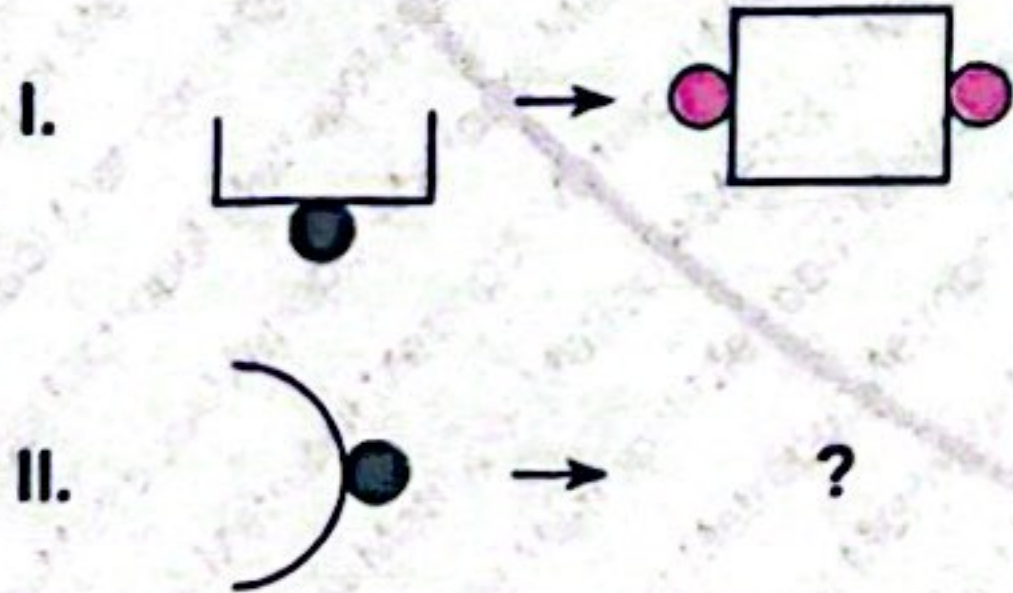


11 ve 12. sorularda I. satırda belirlenen ilişkiye göre II. satırı hangi şeklin tamamladığını bulunuz.
In questions 11 and 12, in accordance with the relation in line I, find the figure which completes line II.

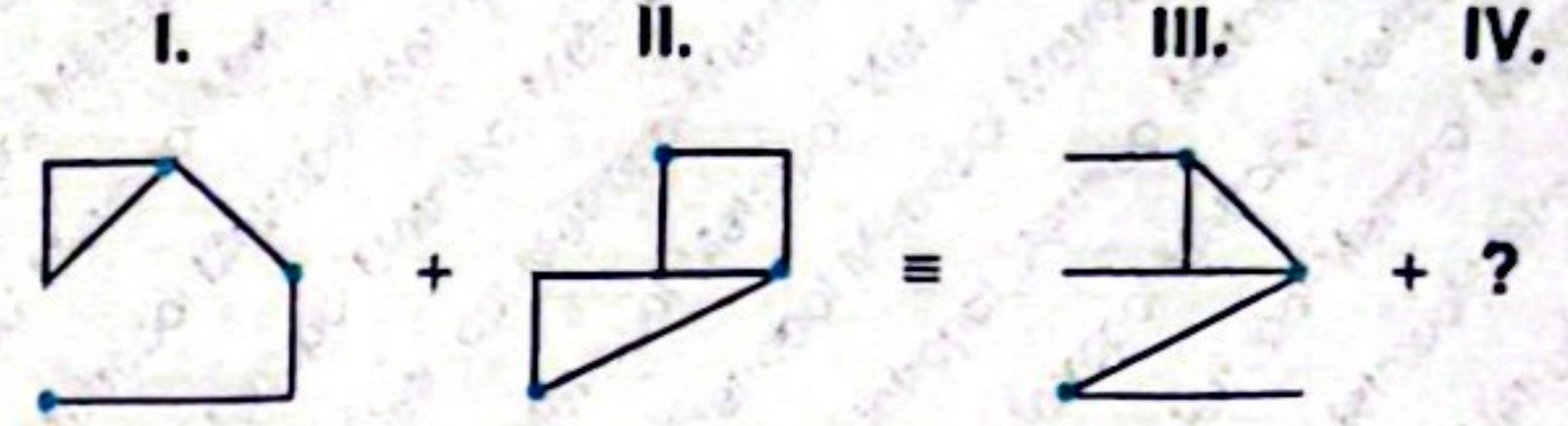
11.



12.

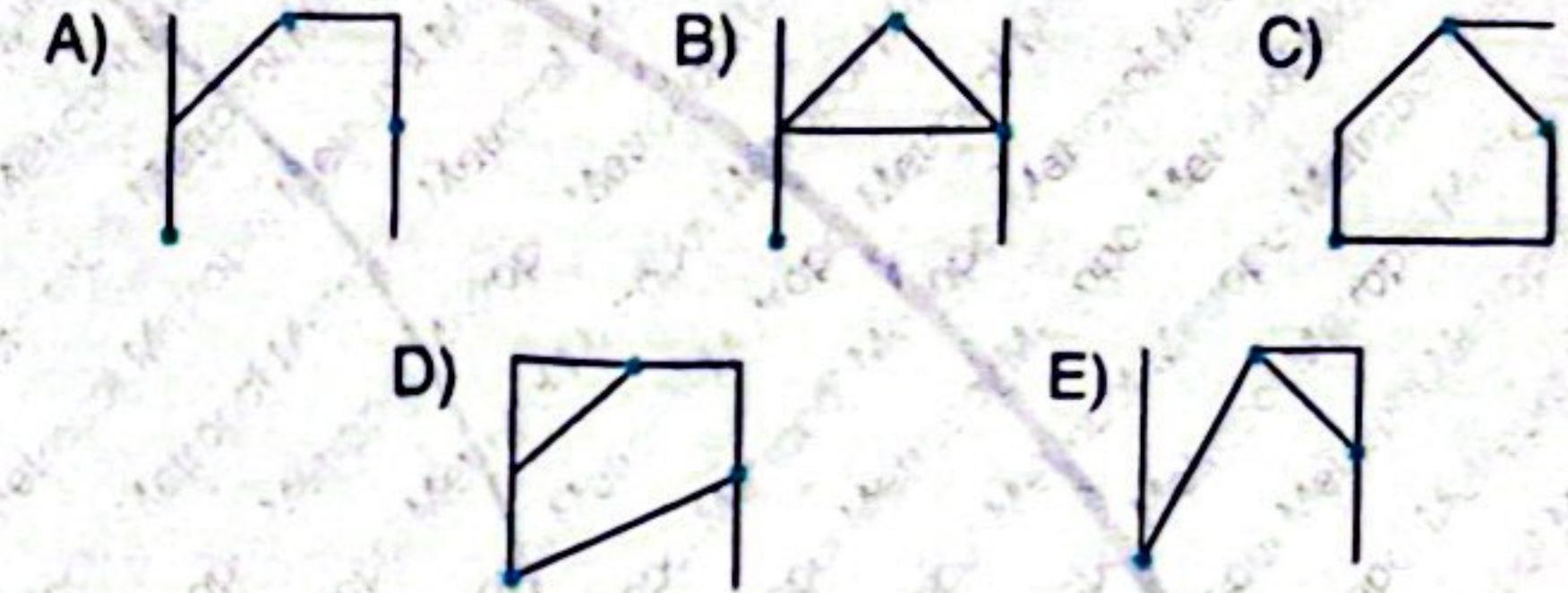


13.

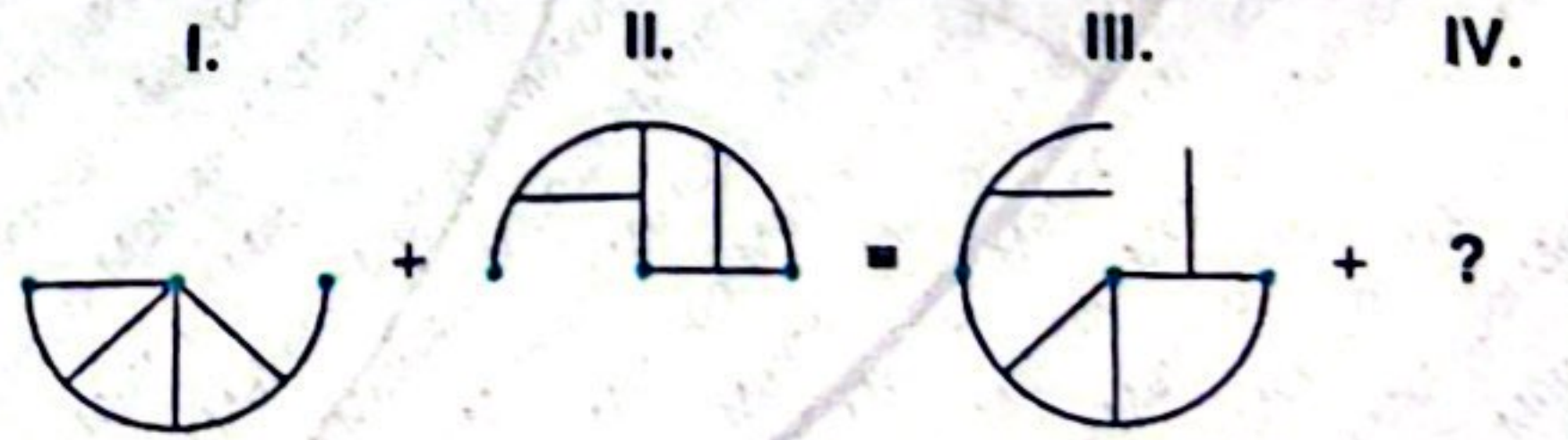


Yukarıdaki soruda soru işareti yerine hangi şeklin getirilmesi gerektiğini bulunuz.

Find the figure that should be placed instead of the question mark in the given figure.

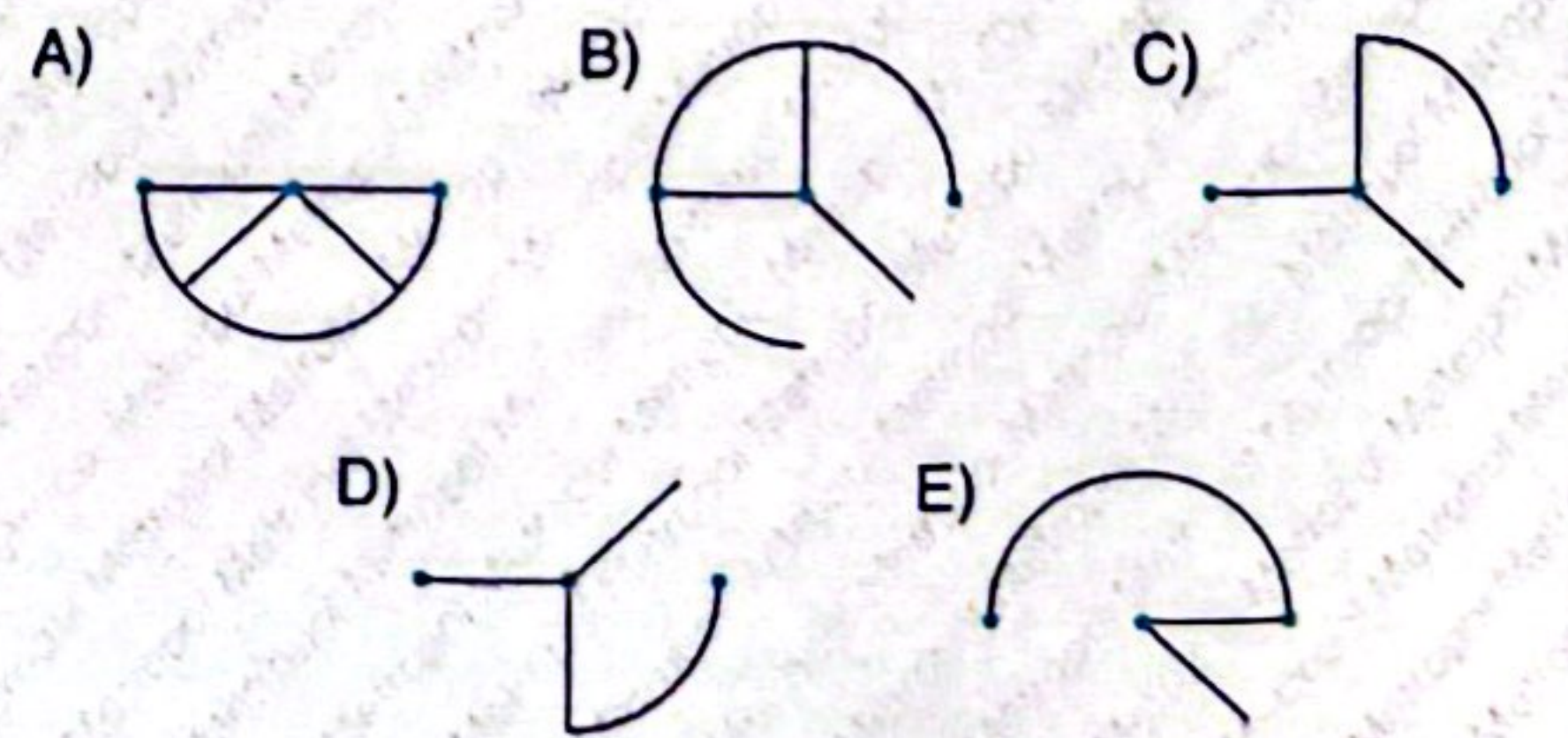


14.



Yukarıdaki soruda soru işareti yerine hangi şeklin getirilmesi gerektiğini bulunuz.

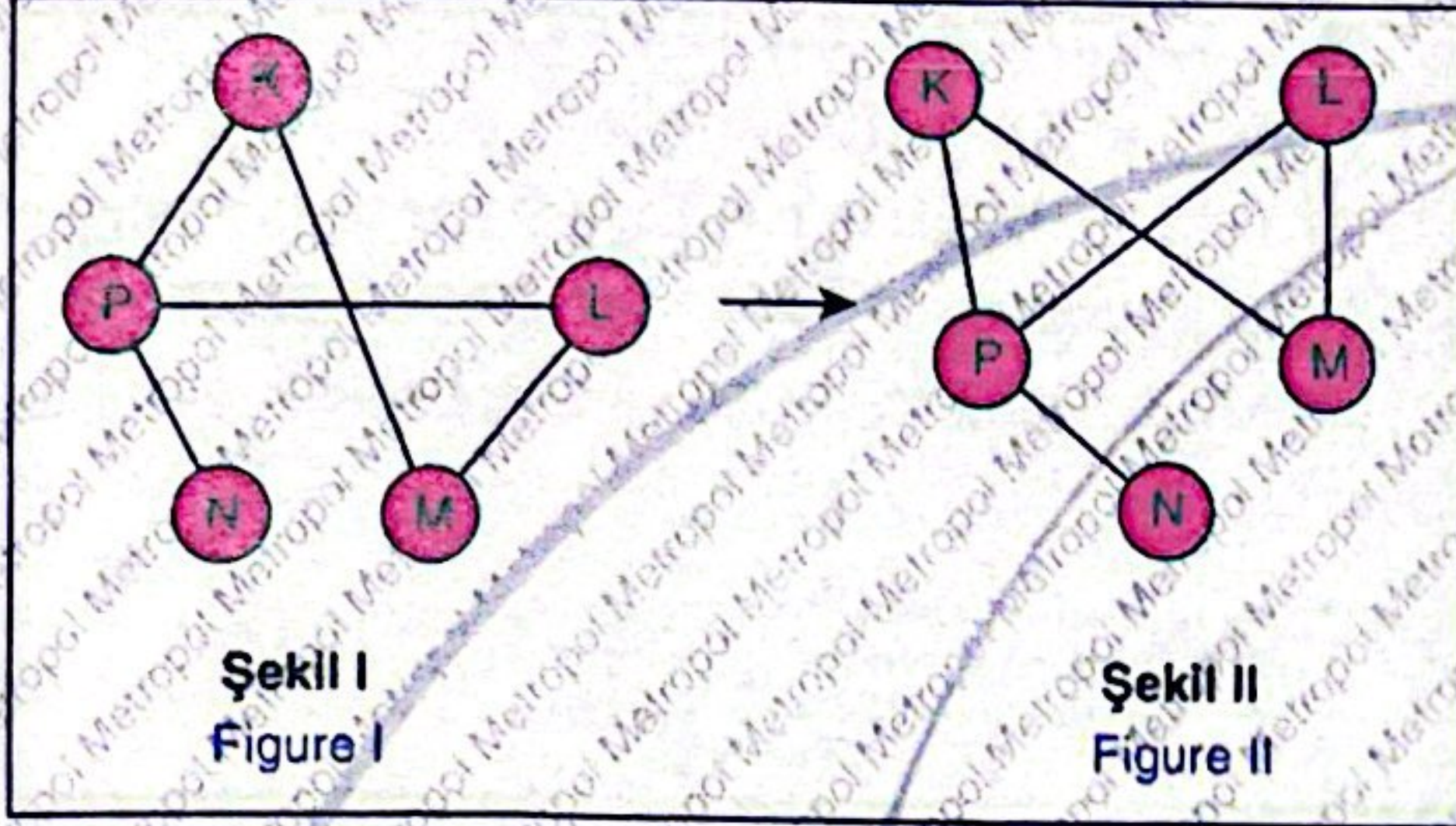
Find the figure that should be placed instead of the question mark in the given figure.



15 ve 16. soruları aşağıdaki örnekte verilen ilişkiye göre cevaplayınız.

Answer question 15 and 16, in accordance with the relation established in the following example.

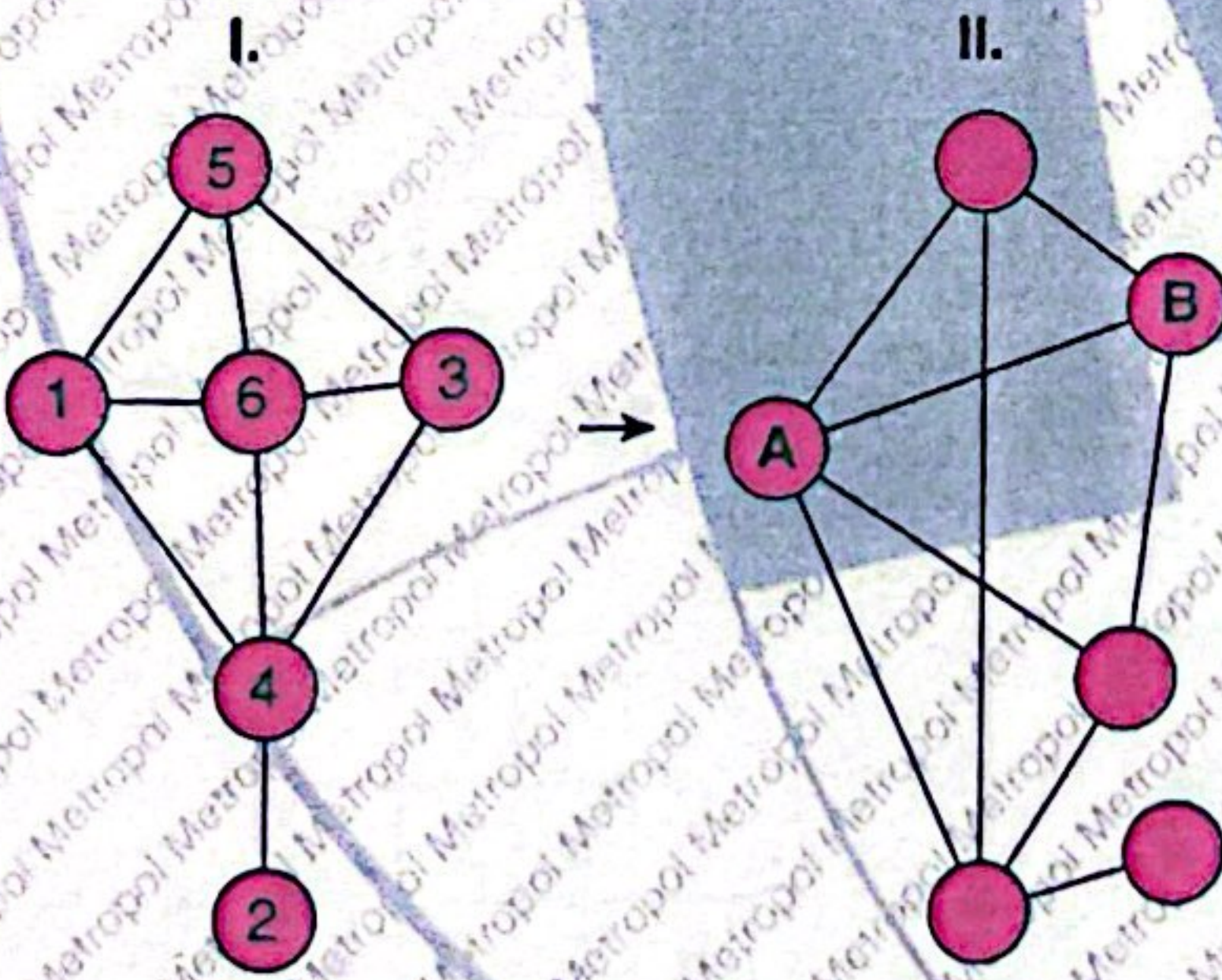
ÖRNEK / EXAMPLE:



K, L, M, N ve P harfleri I. şekildeki gibi birbirine bağlanmıştır. I. şekildeki bağlantı sayıları ve birbirine bağlanan harfler değişmemek koşuluyla II. şekil elde edilmiştir.

The letters K, L, M, N and P in figure I are linked to each other. Without any change in the link number and the linked letters of figure I, figure II is obtained.

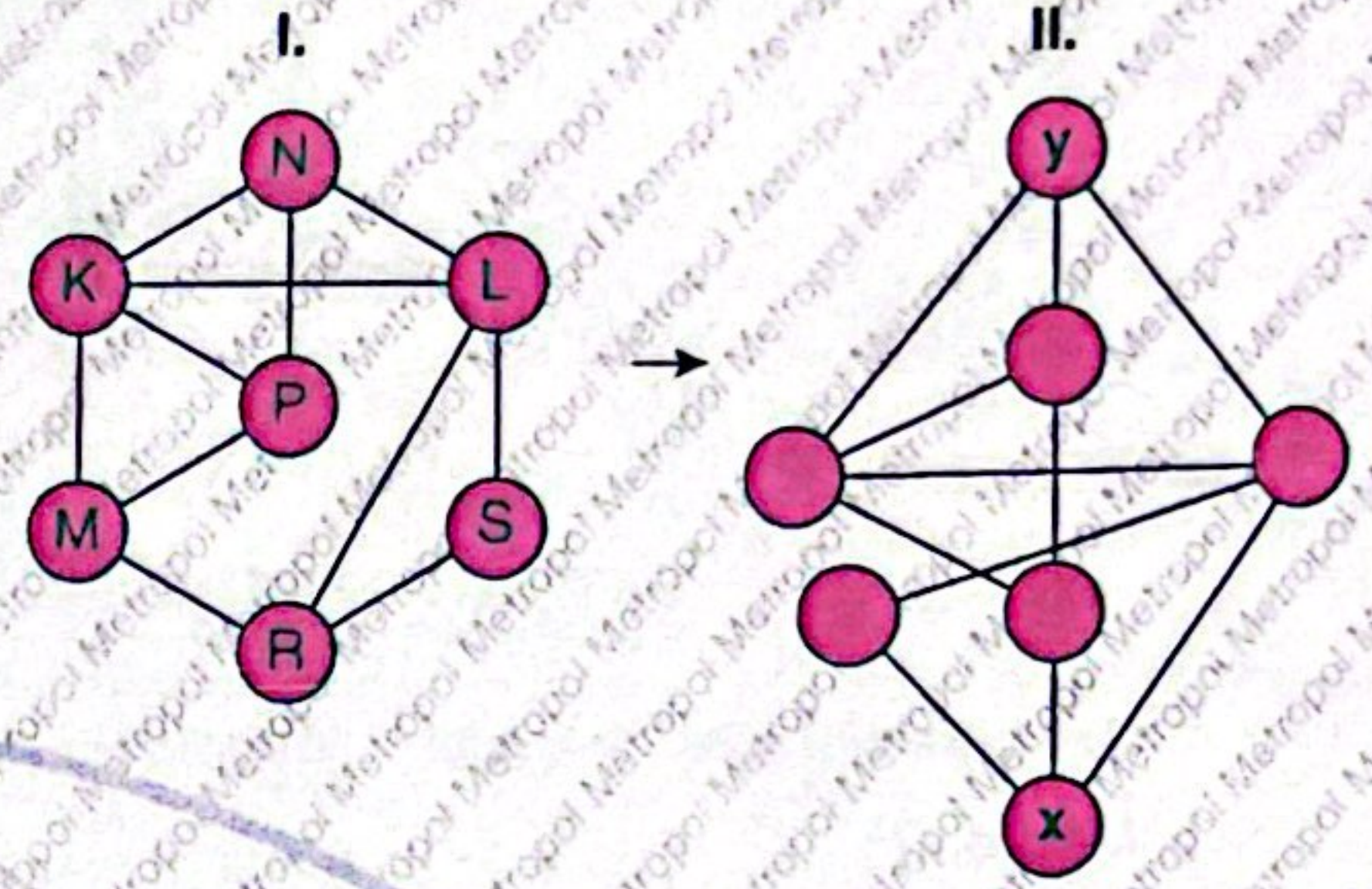
15.



$\Rightarrow A + B = ?$

- A) 5 B) 6 C) 7 D) 9 E) 11

16.

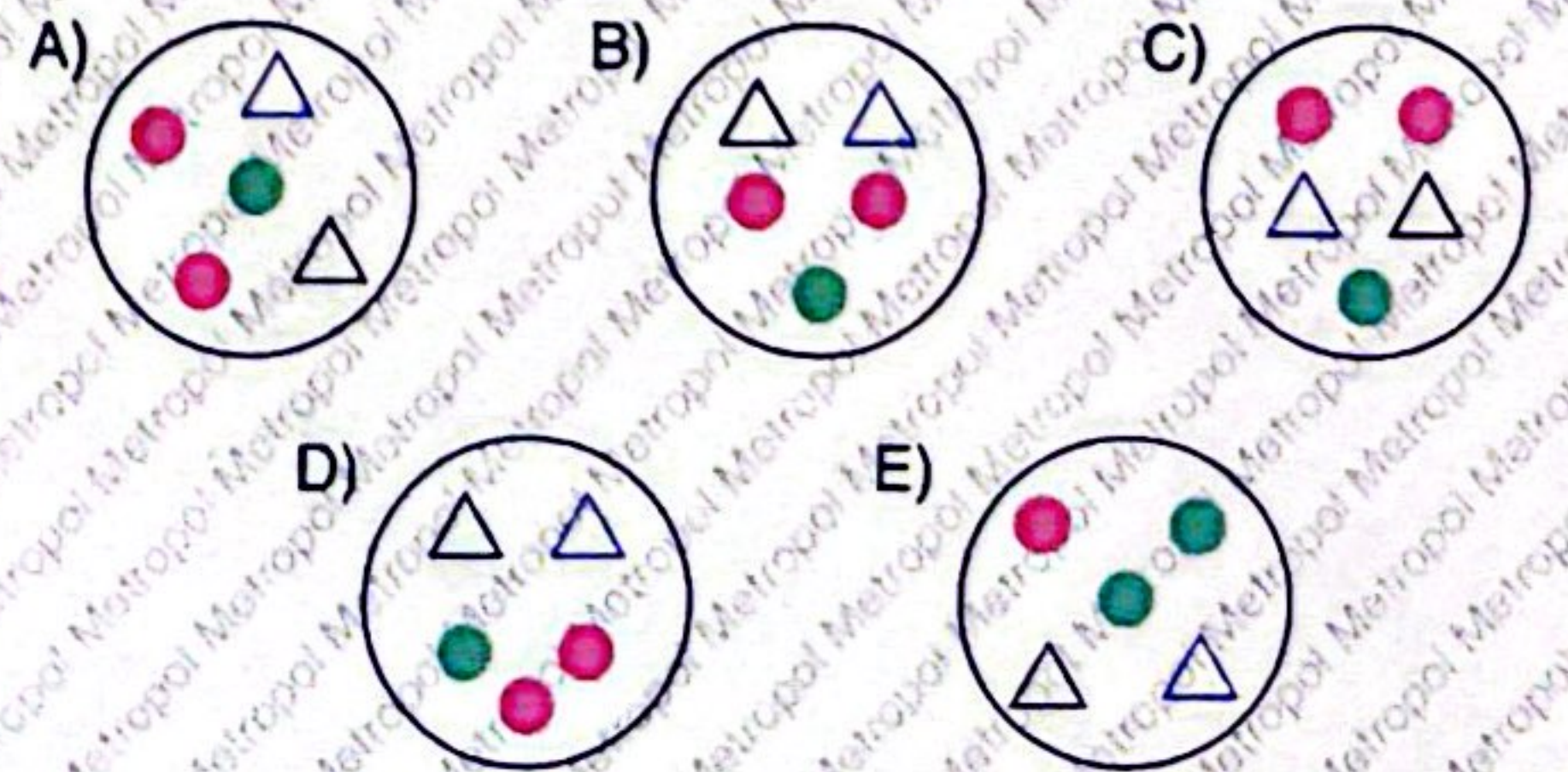


$\Rightarrow x = ? ; y = ?$

- A) R ; N B) R ; P C) N ; R
D) P ; N E) M ; N

17. Aşağıdaki soruda farklı olan şekli bulunuz.

In the following question, find the different figure.

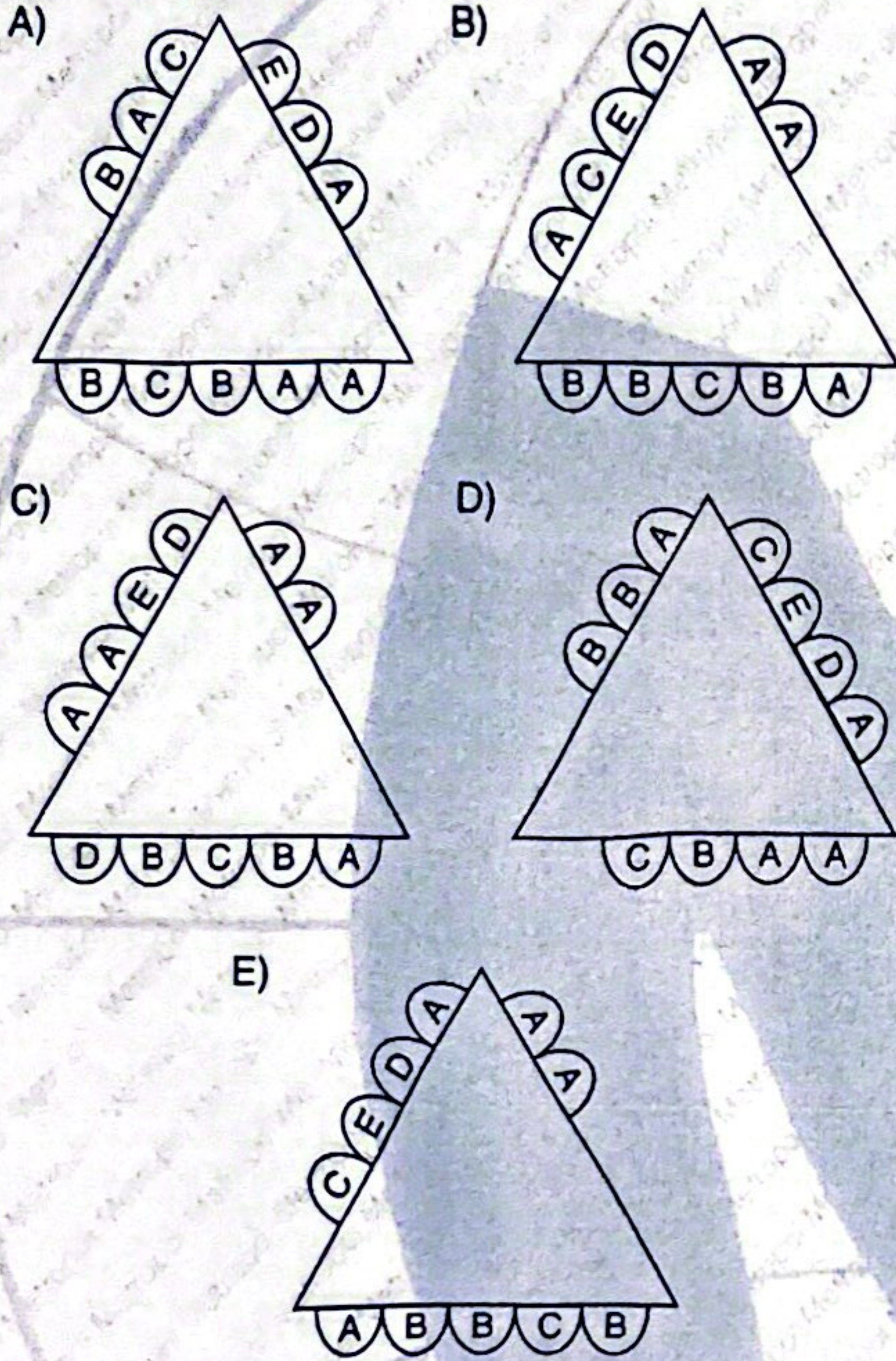


18.



Aşağıdakilerden hangisi yukarıdaki şekilden farklıdır?

Which of the following is different from the given figure ?



19.

	○▲■	●■▲	■▲○
▲●■	▲■	K	▲
■●○	○	■	L
●▲■	M	●▲	▲

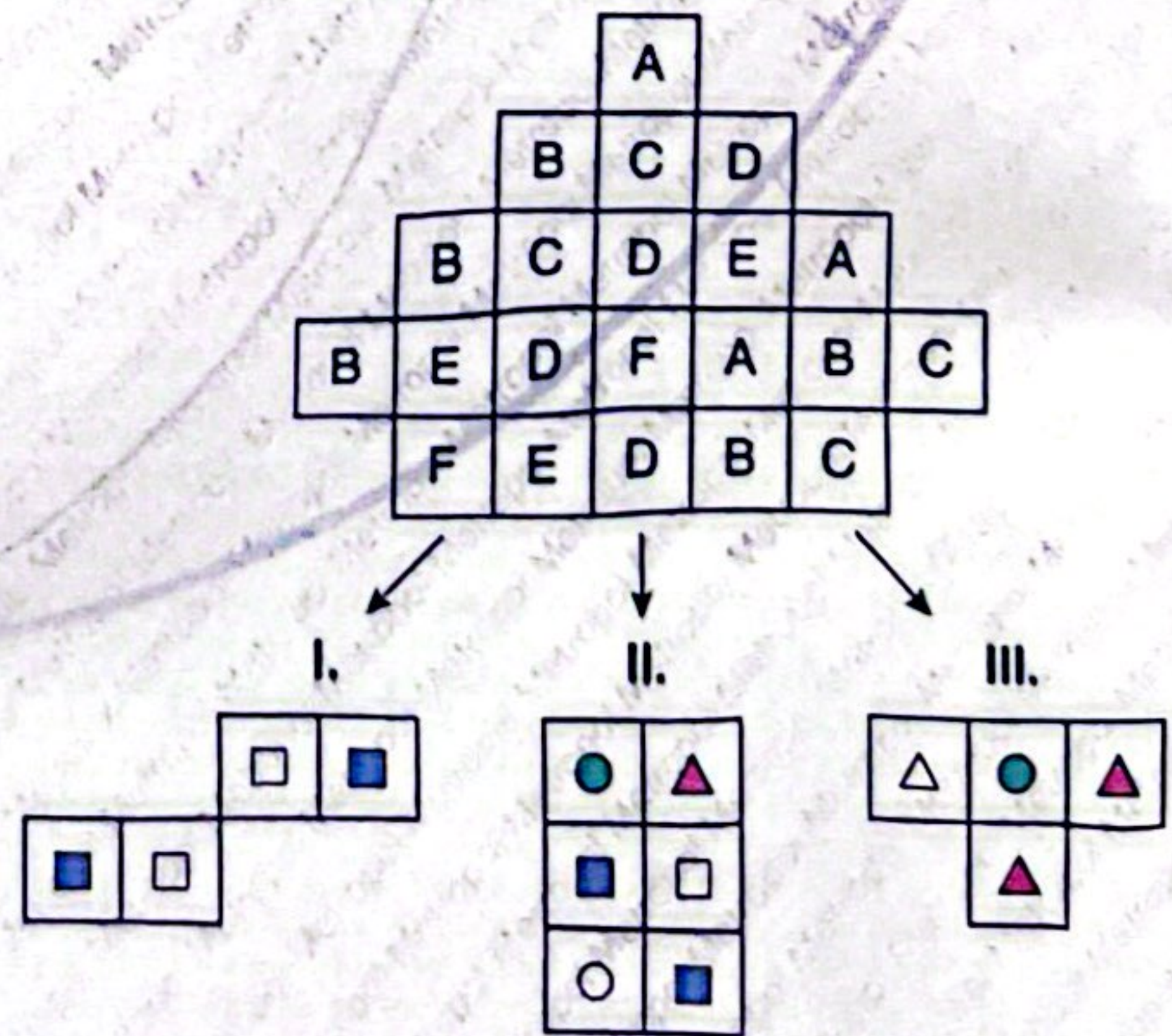
⇒ K = ?, L = ?, M = ?

Yukarıdaki tabloda K, L ve M nin yerine hangi şekiller gelmelidir?

Which figures do K, L and M stand for in the table above?

	<u>K</u>	<u>L</u>	<u>M</u>
A)	▲●	▣○	▲■
B)	▣○	■●	○▲
C)	■▲	●▣	■▲
D)	●■	▲○	▣○
E)	○▣	▣●	▲■

20.



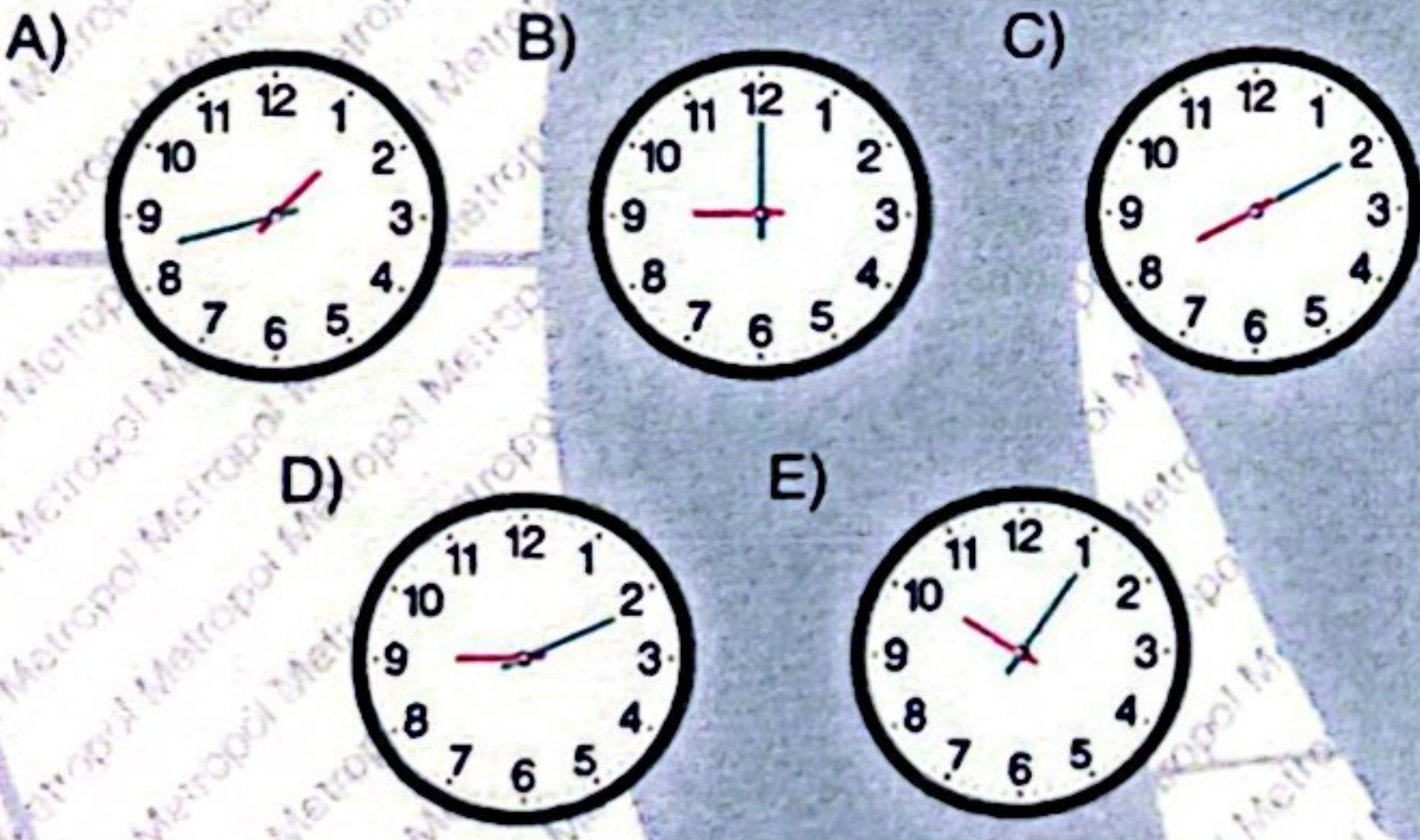
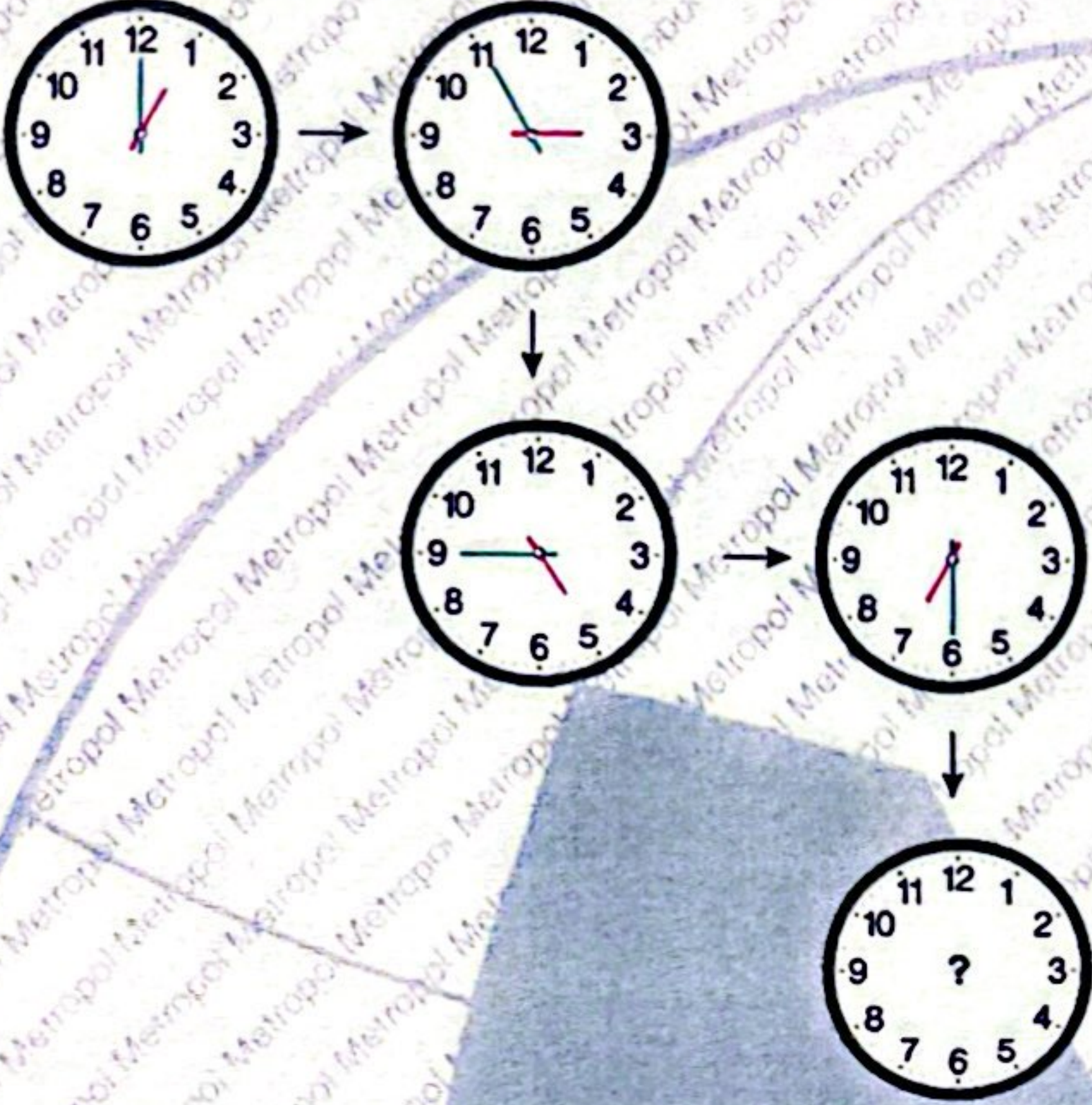
⇒ A = ?; C = ?; F = ?

- A) ▲; △; ○ B) △; ▲; ○ C) △; ▲; ●
D) ▲; △; ○ E) ▲; △; ■

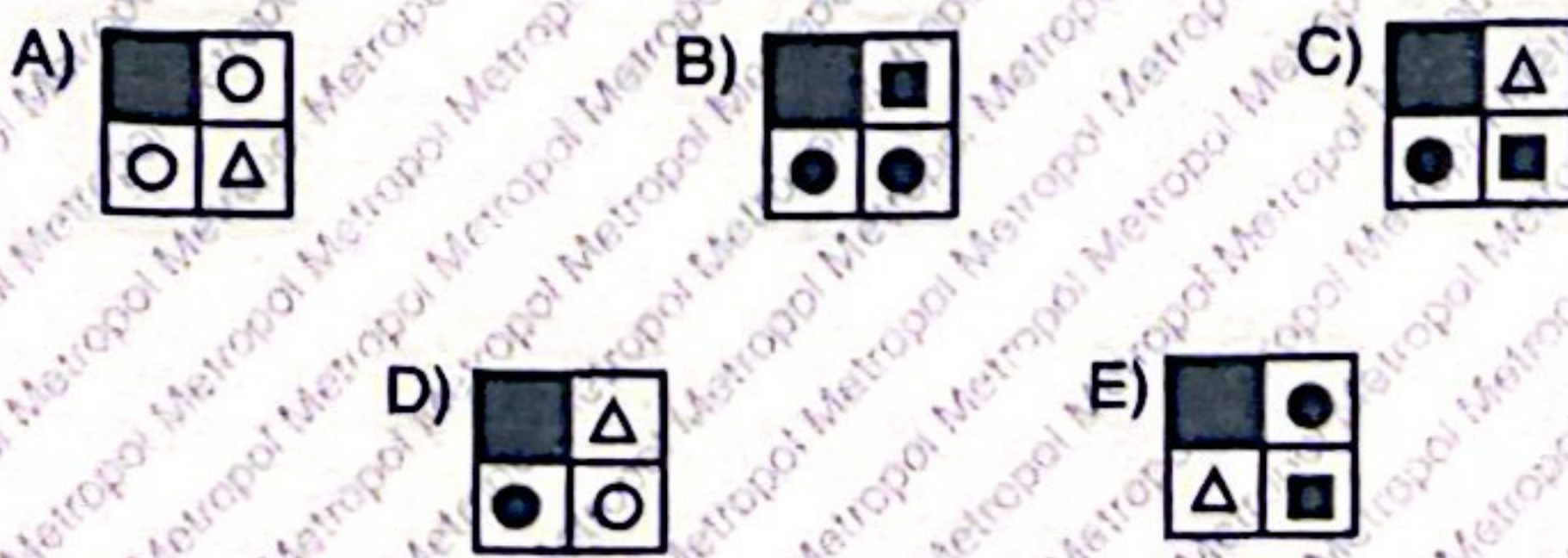
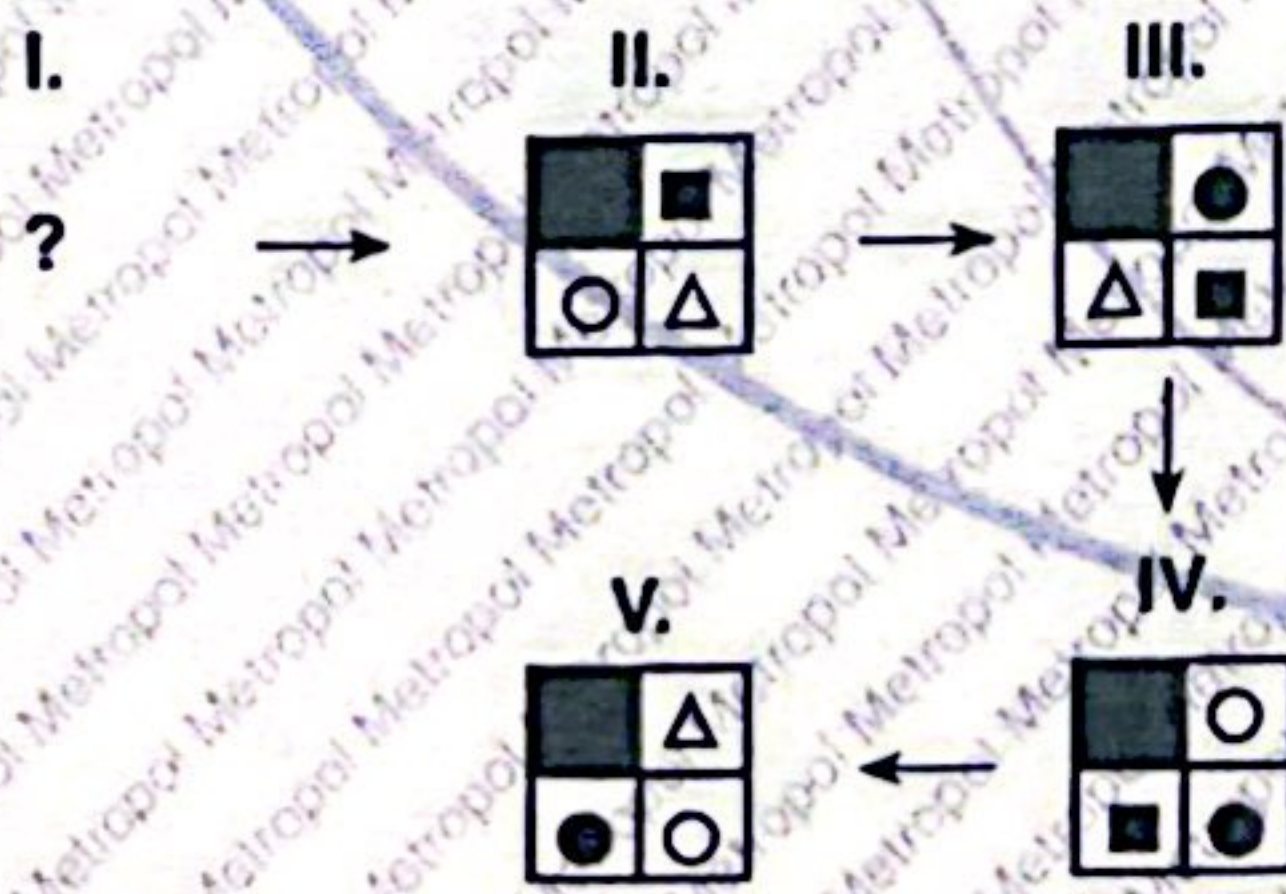
21 - 23. sorularda, verilen her bir şekil dizisindeki soru işaretinin yerine hangi şeklin getirilmesi gerektiğini bulunuz.

In questions 21 - 23, find the figure which should replace the question mark in each given figure sequence.

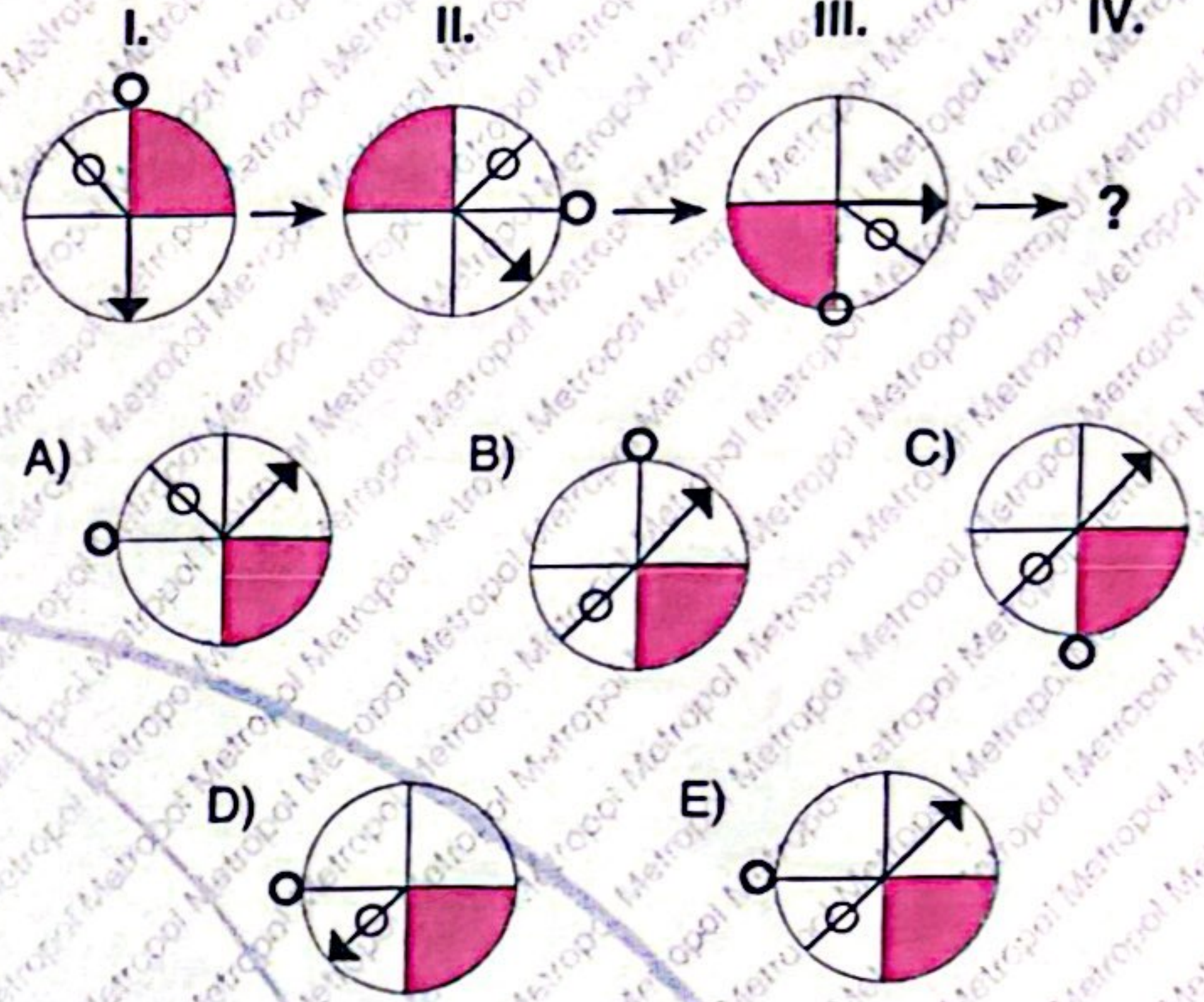
21.



22.



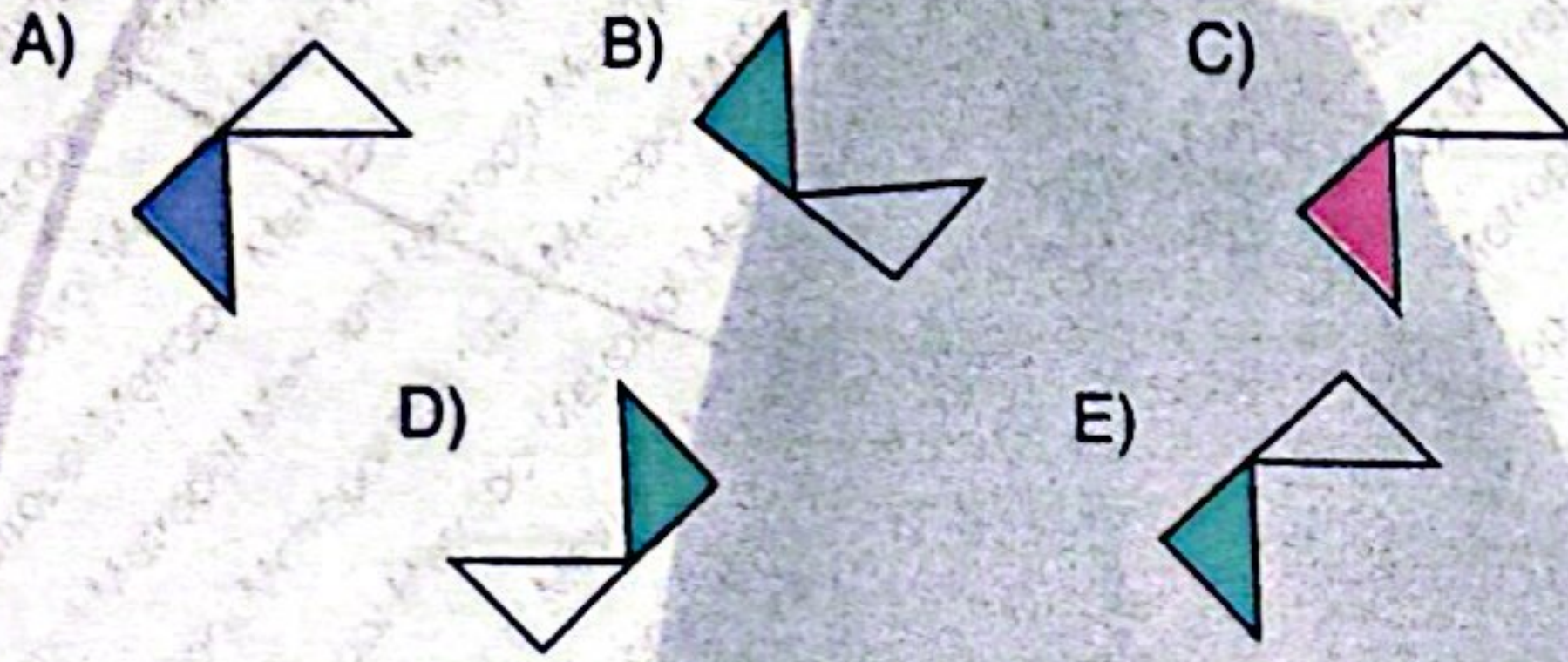
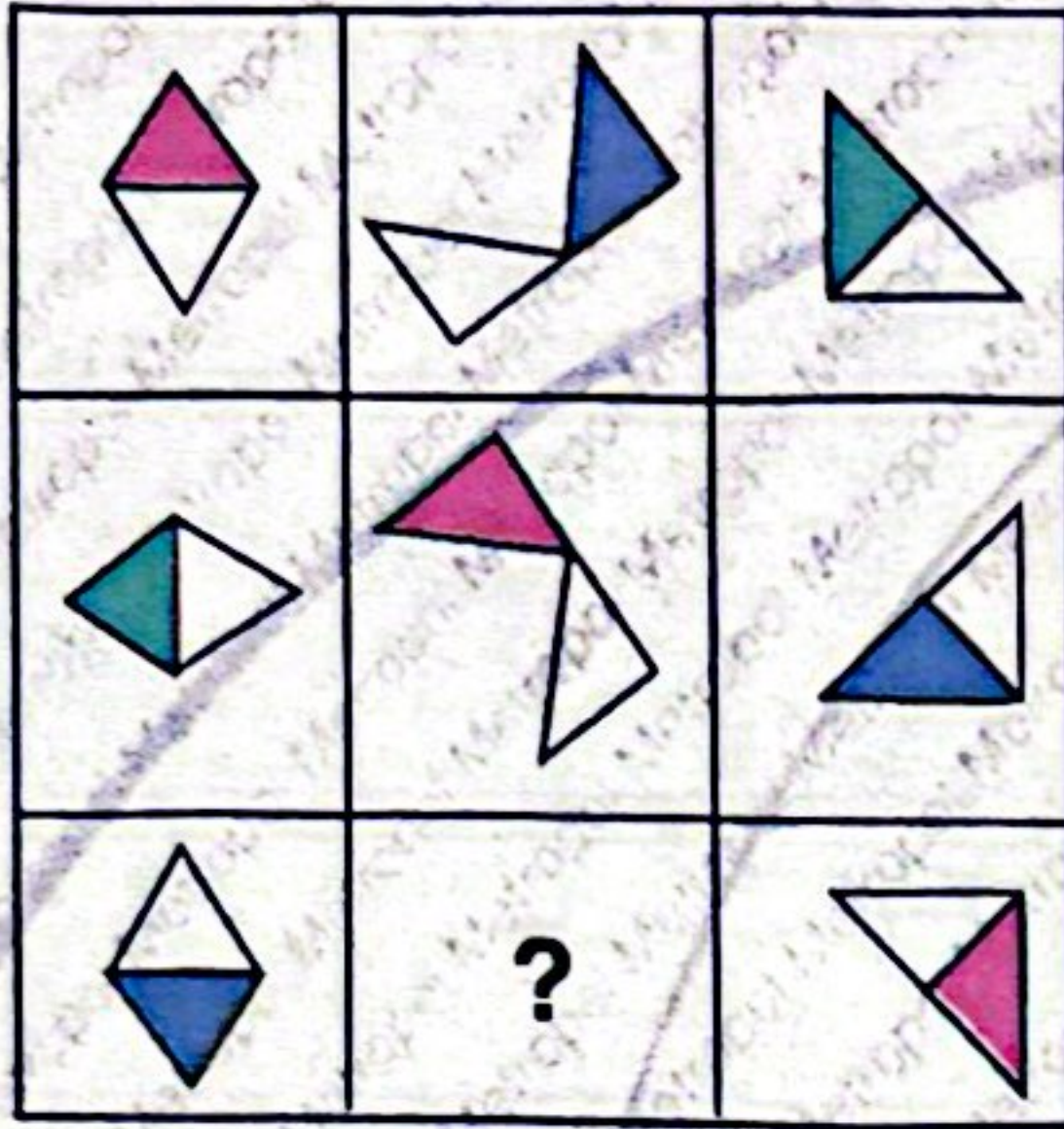
23.



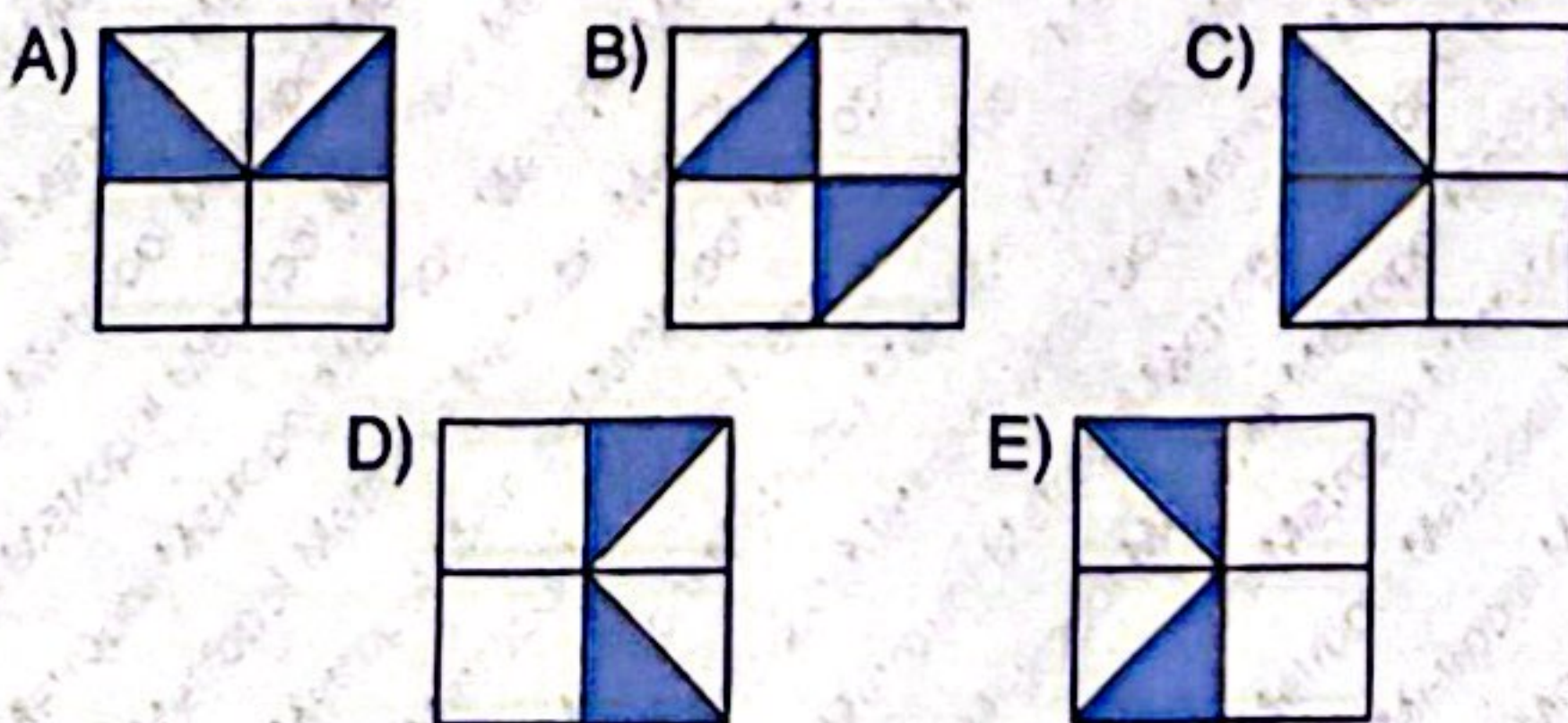
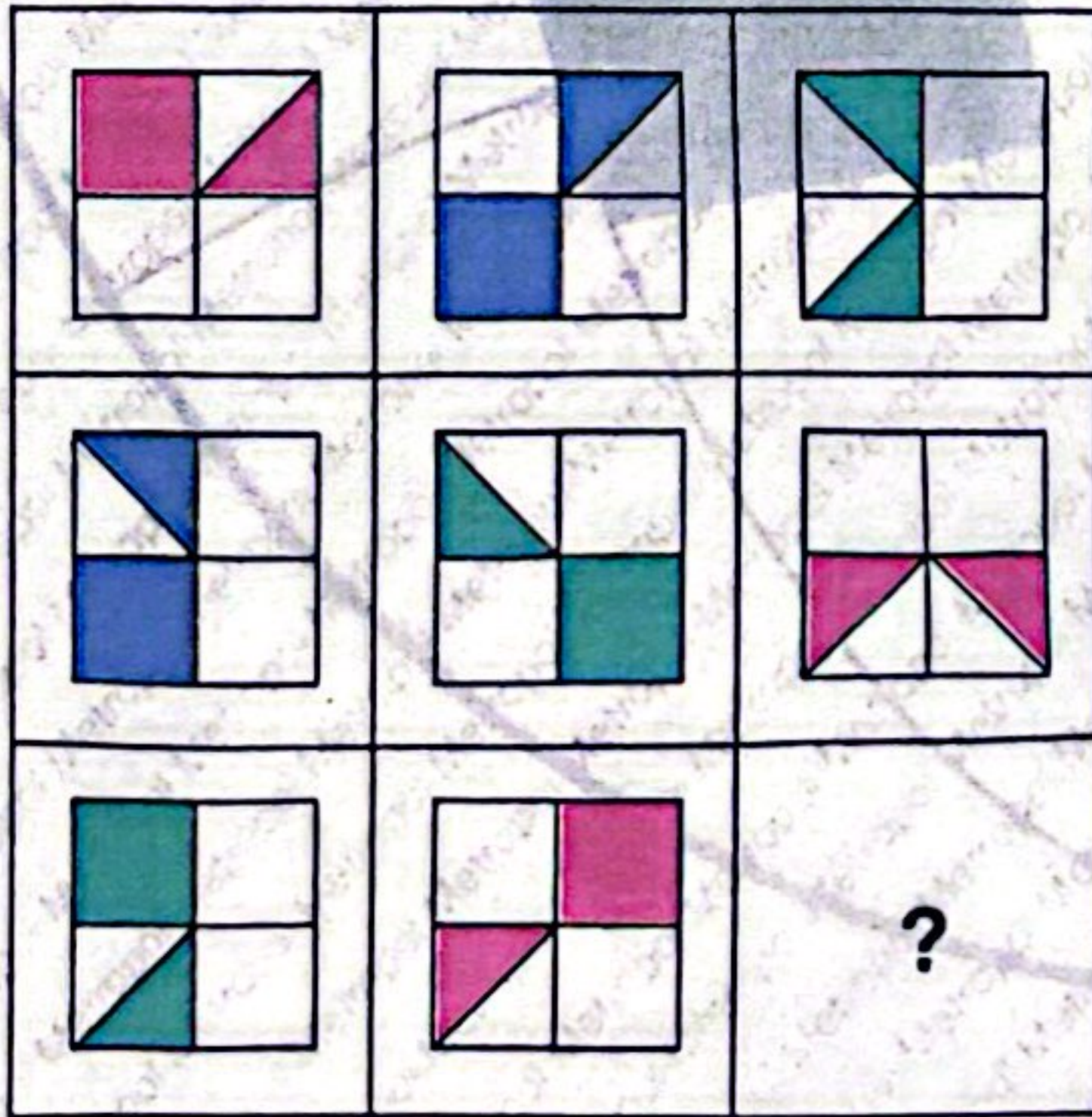
24 - 26. sorularda, verilen her bir şekil matrisindeki soru işaretinin yerine hangi şeklin getirilmesi gerektiğini bulunuz.

In questions 24 - 26, find the figure which should replace the question mark in each given figure matrix.

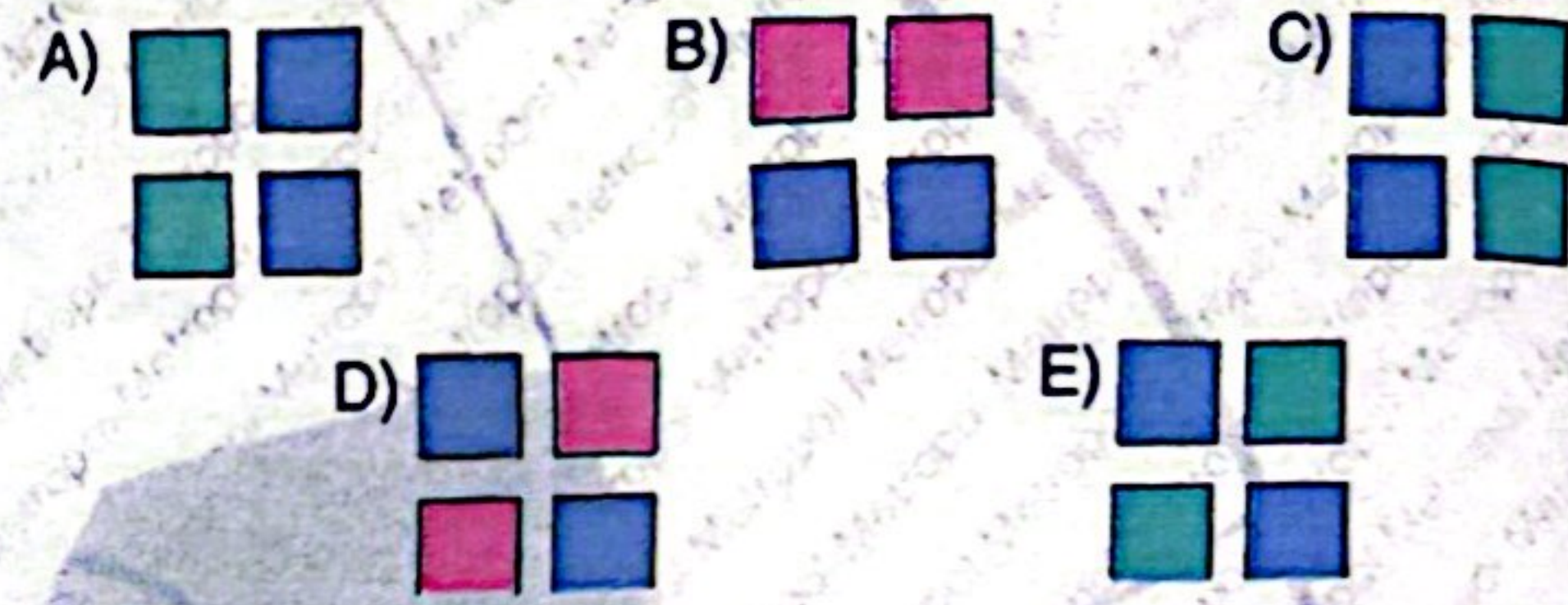
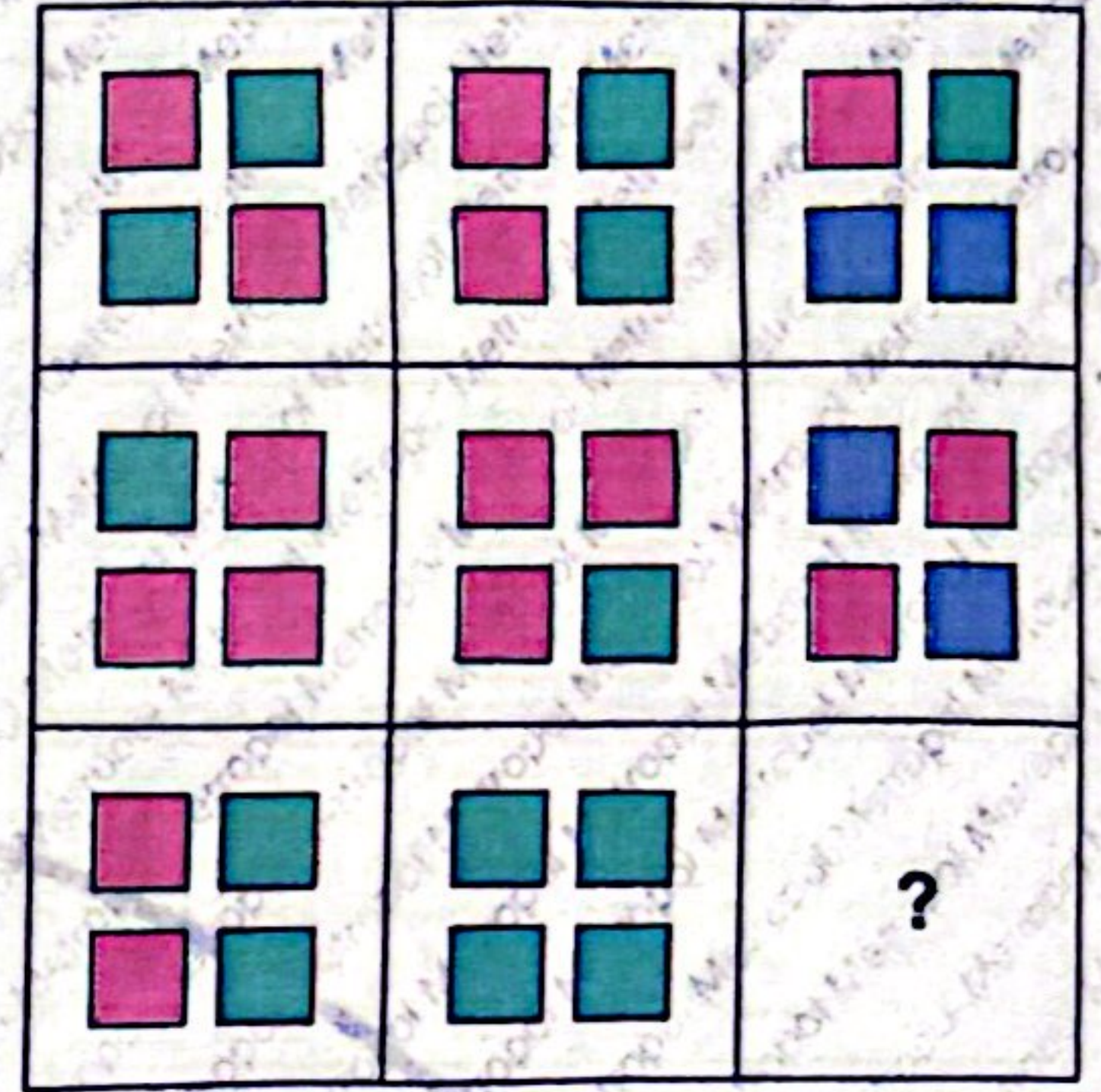
24.



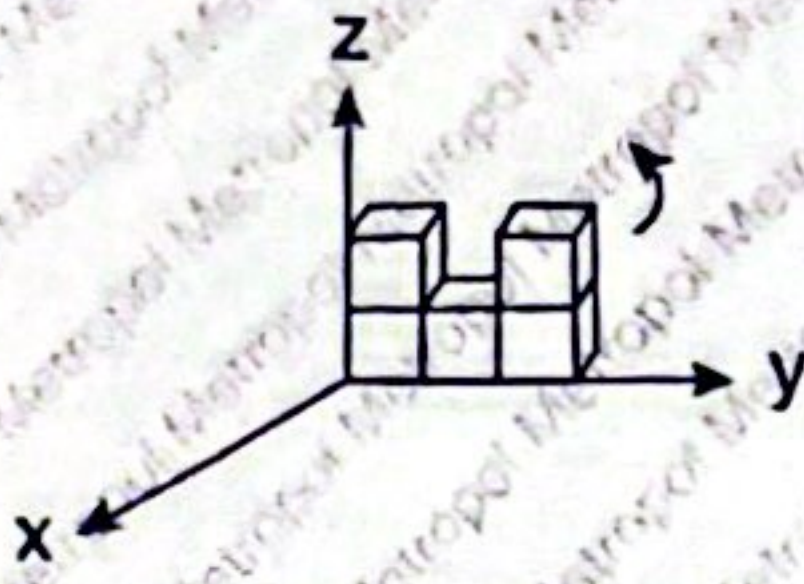
25.



26.



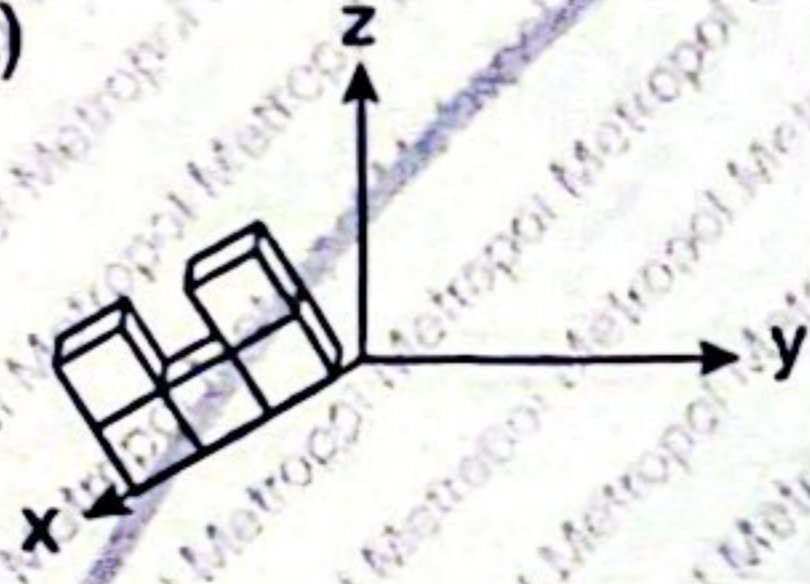
27.



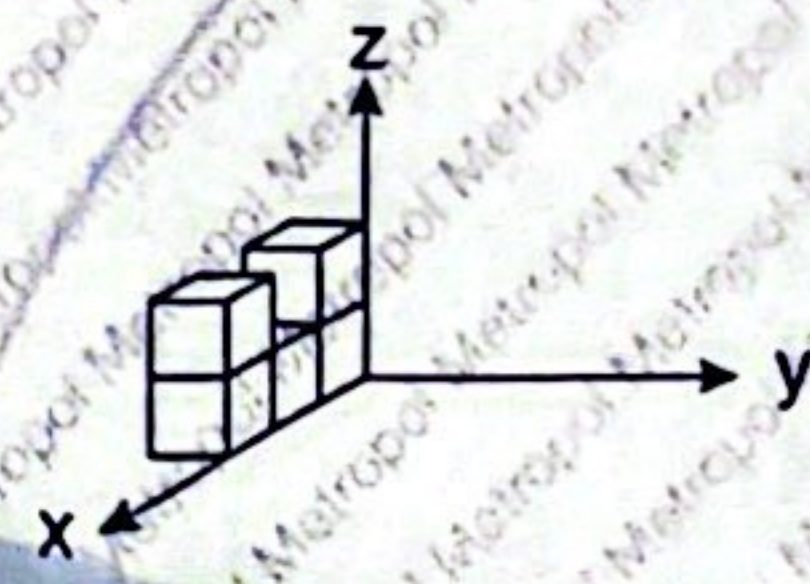
Yukarıdaki şekil z eksenî etrafında saat yönünün tersine 180° döndürülürse aşağıdakilerden hangisi elde edilir?

If the figure is rotated 180° counterclockwise about the z-axis, which of the following will be obtained?

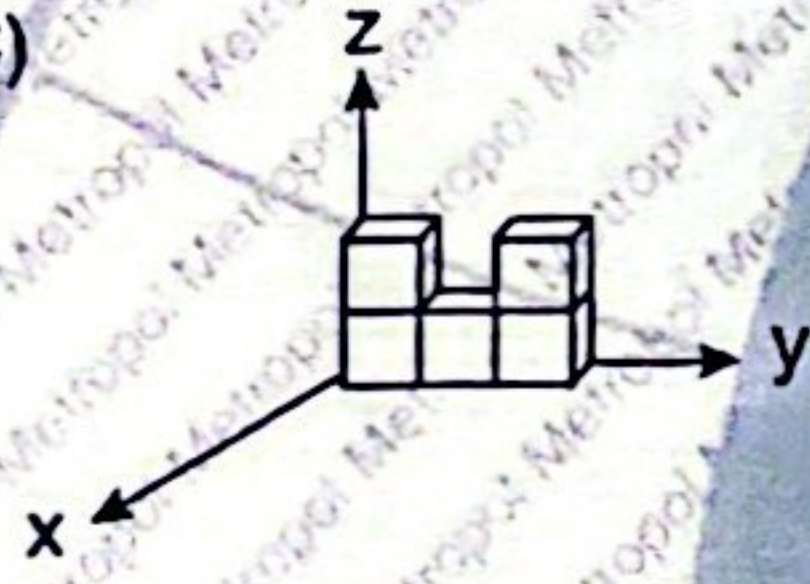
A)



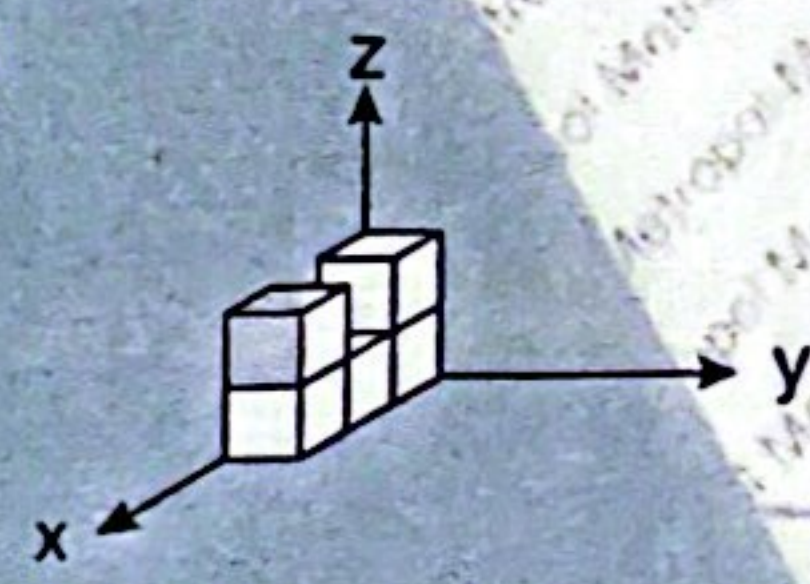
B)



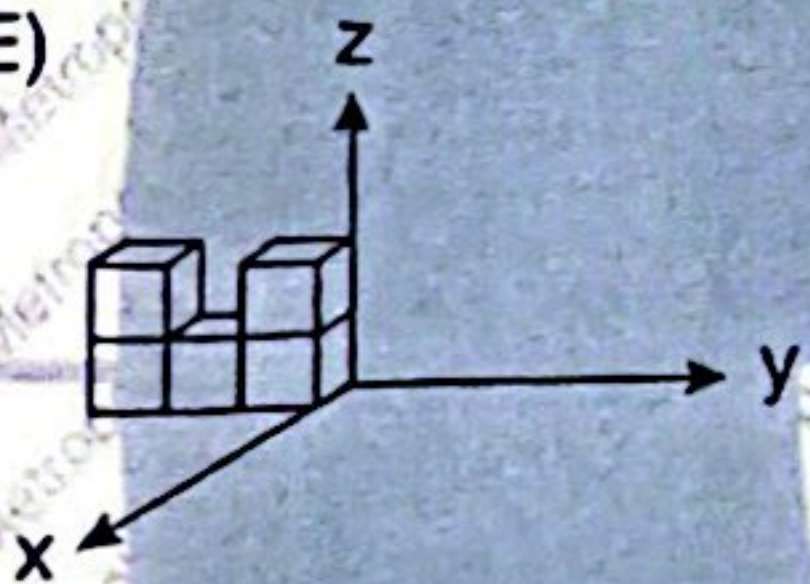
C)



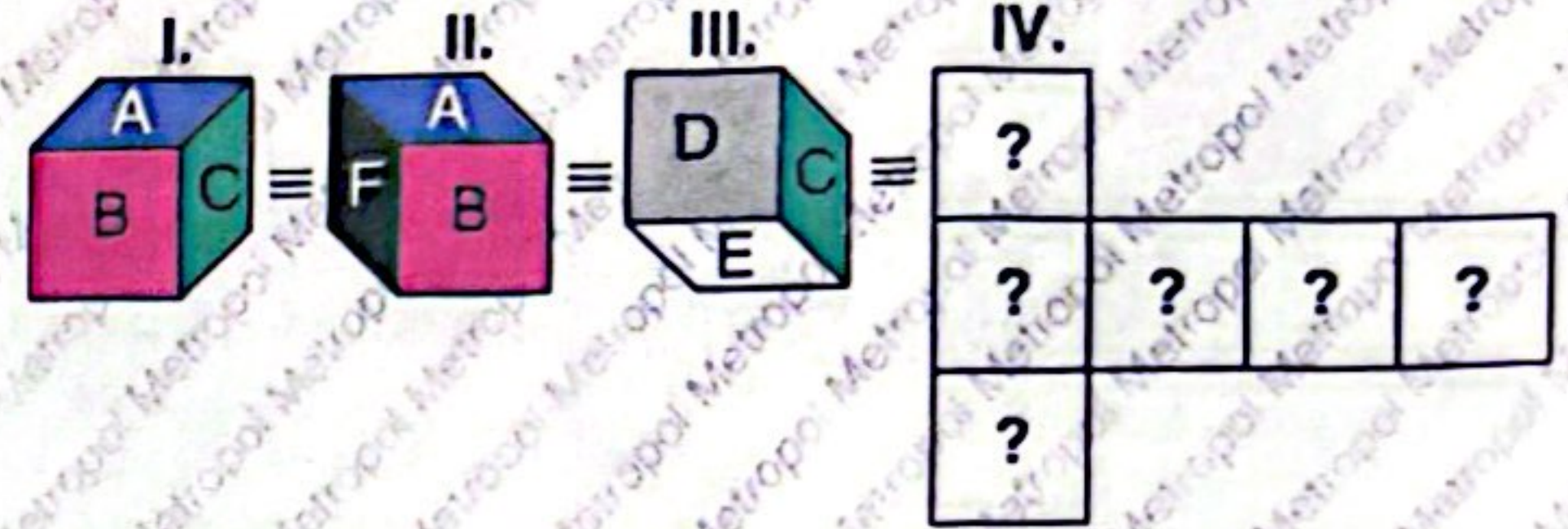
D)



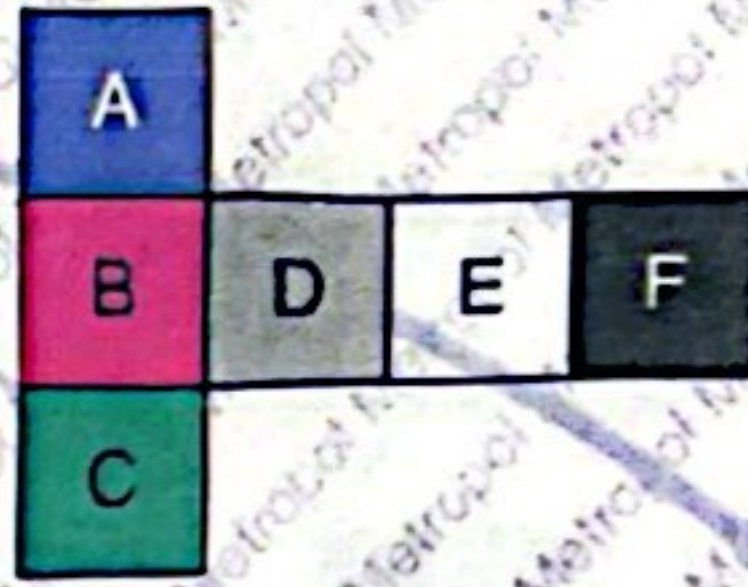
E)



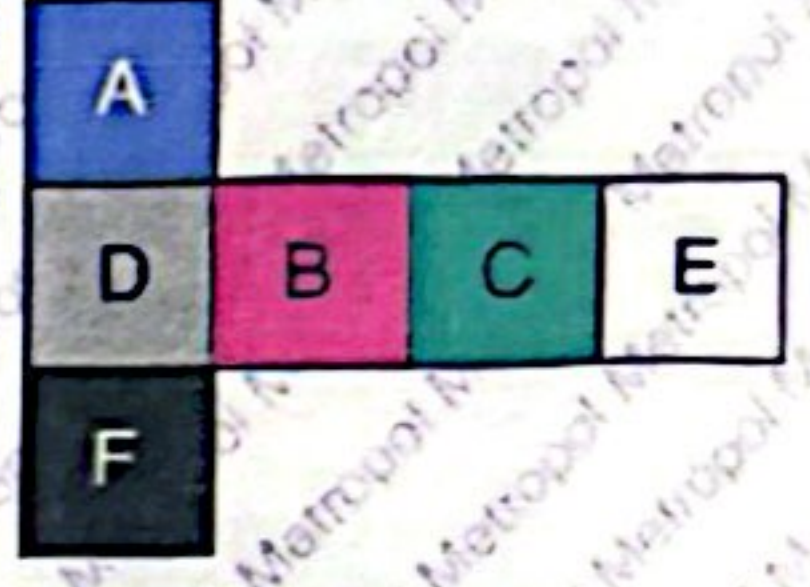
28.



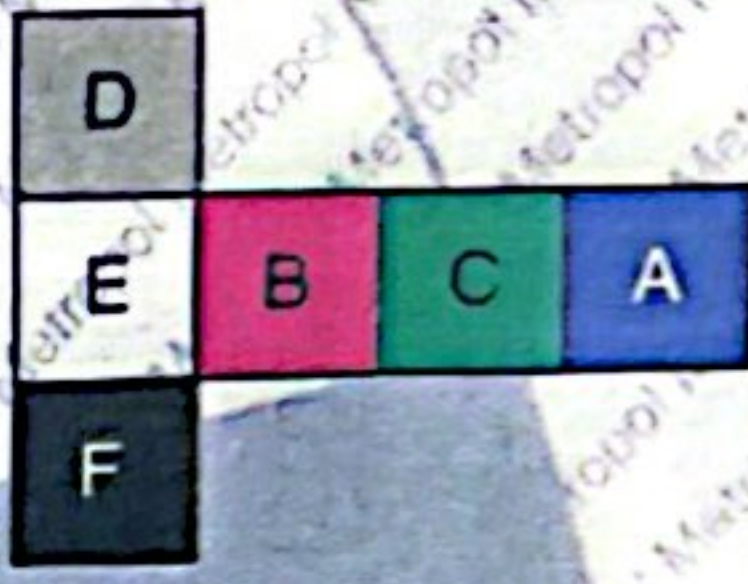
A)



B)



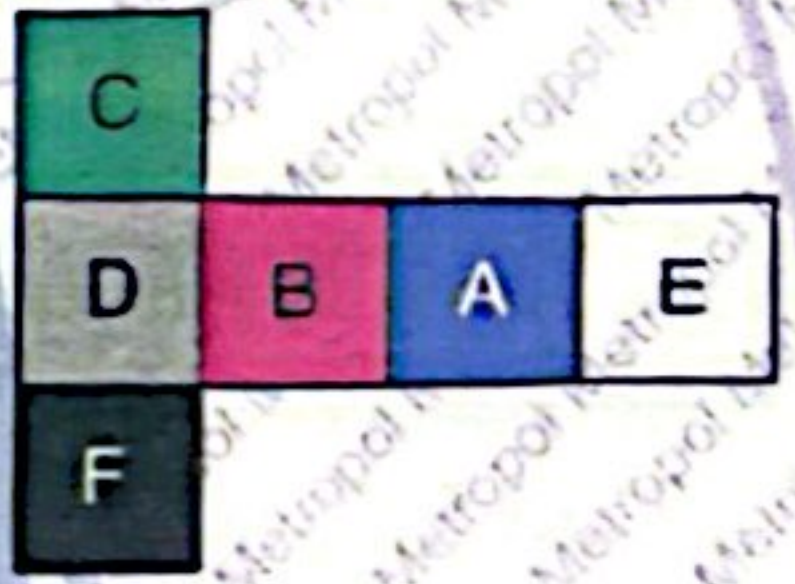
C)



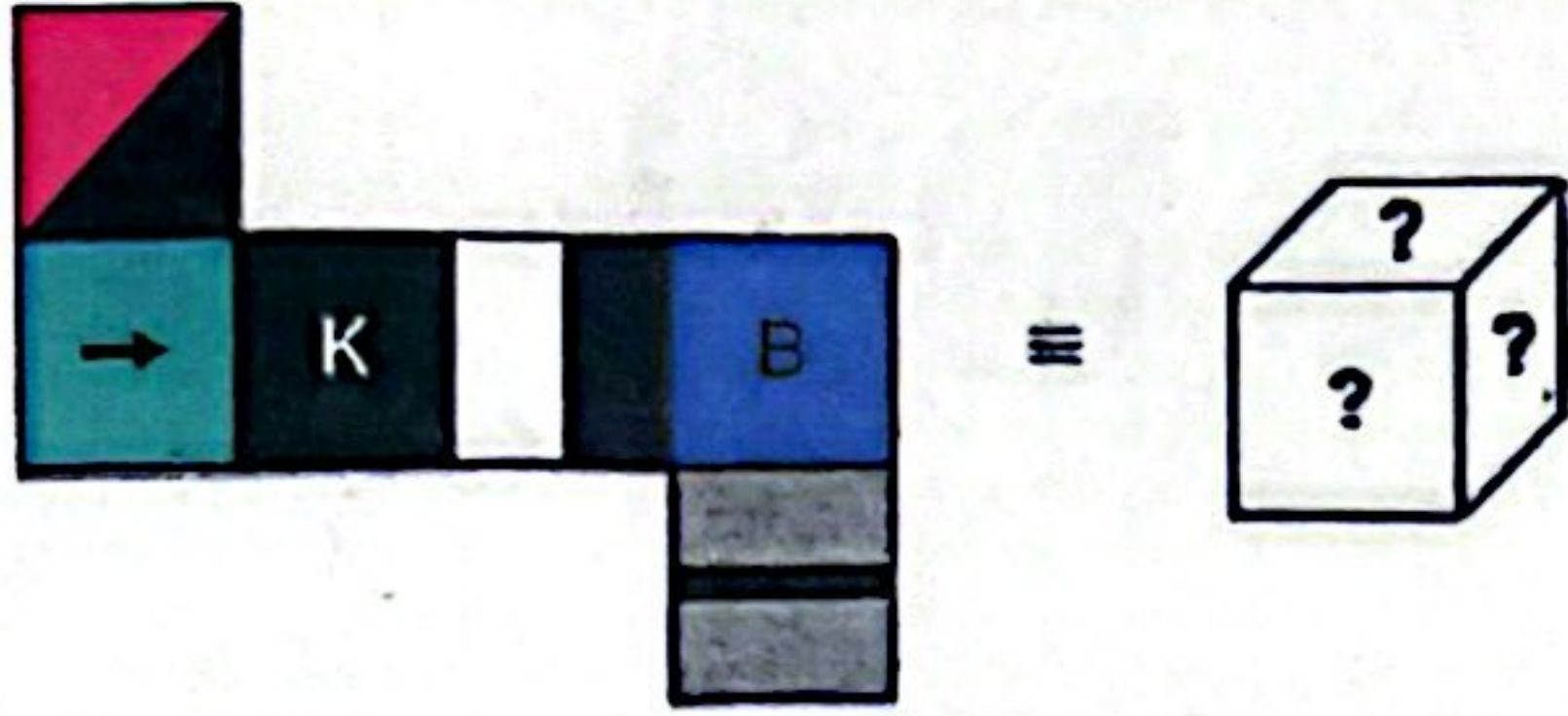
D)



E)

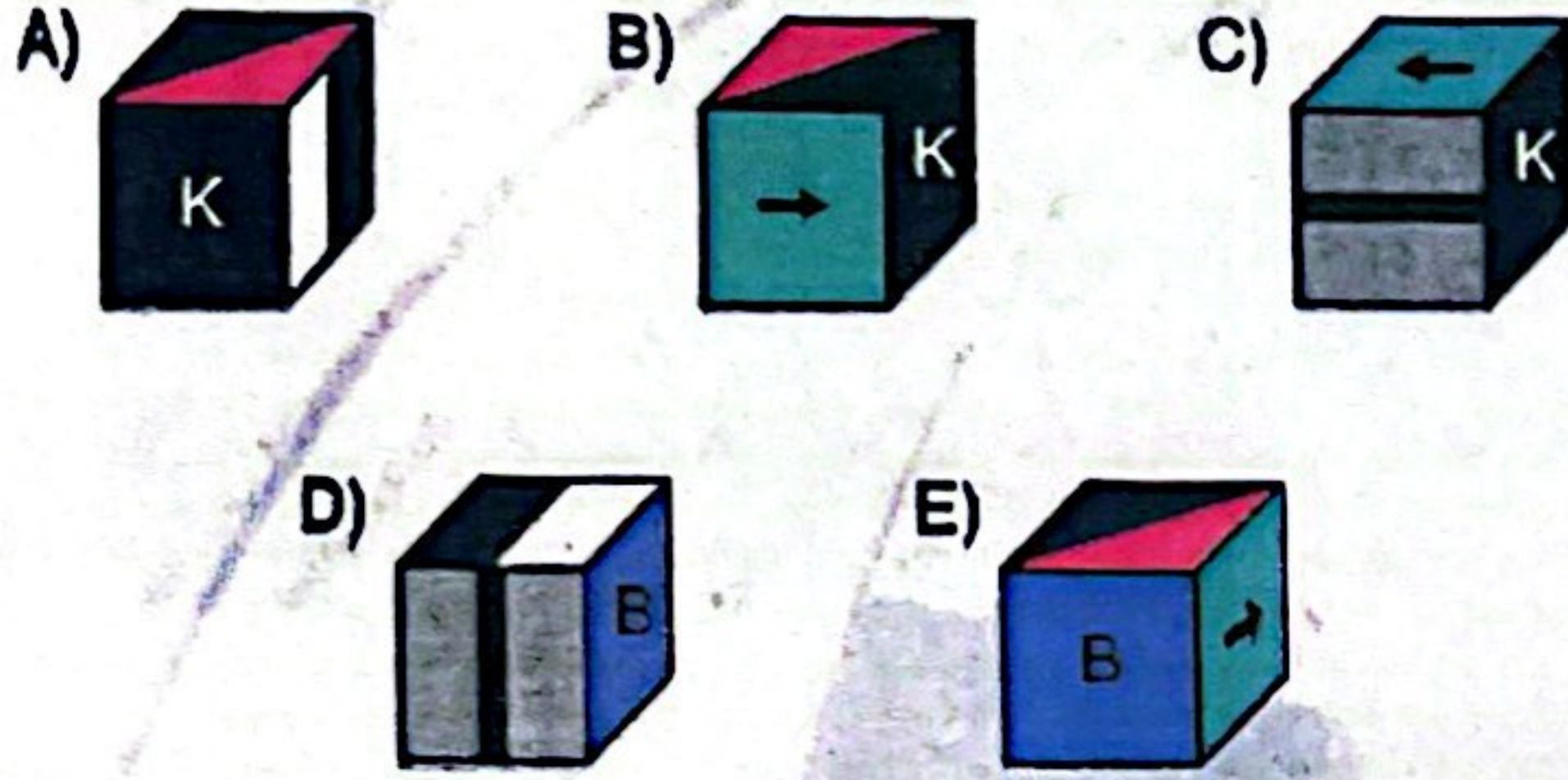


29.

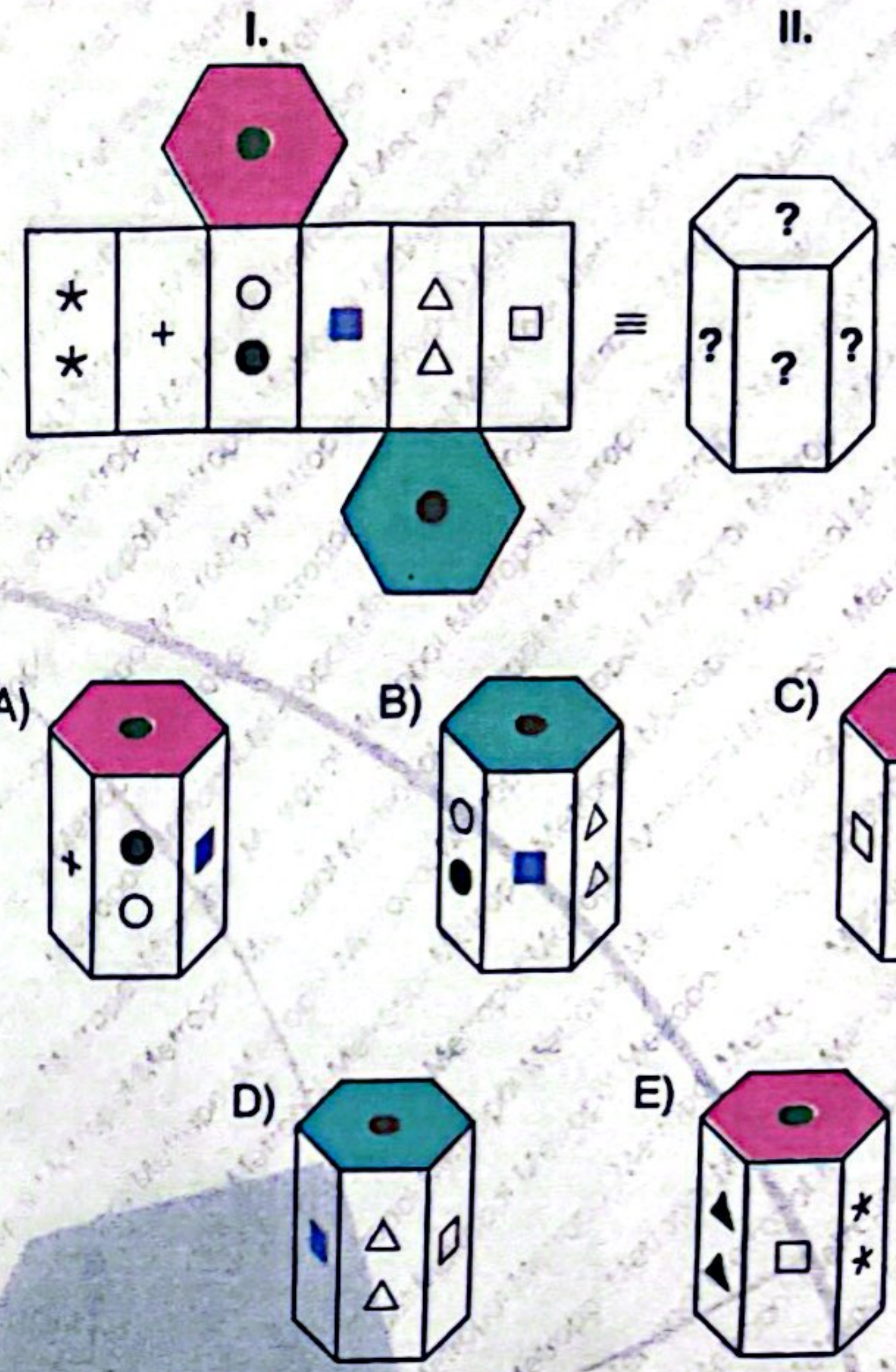


Aşağıdakilerden hangisi yukarıdaki şeklin kapalı halidir?

Which one of the following is the closed form of the figure above?



30.



31. 3 5 9 17 33 ?

Yukarıda verilen sayı dizisinde soru işaretinin yerine getirilmesi gereken sayıyı bulunuz.

Find the number which the question mark stands for in the given number sequence.

- A) 65 B) 64 C) 63 D) 62 E) 60

32. 3 4 7 11 18 29 A B

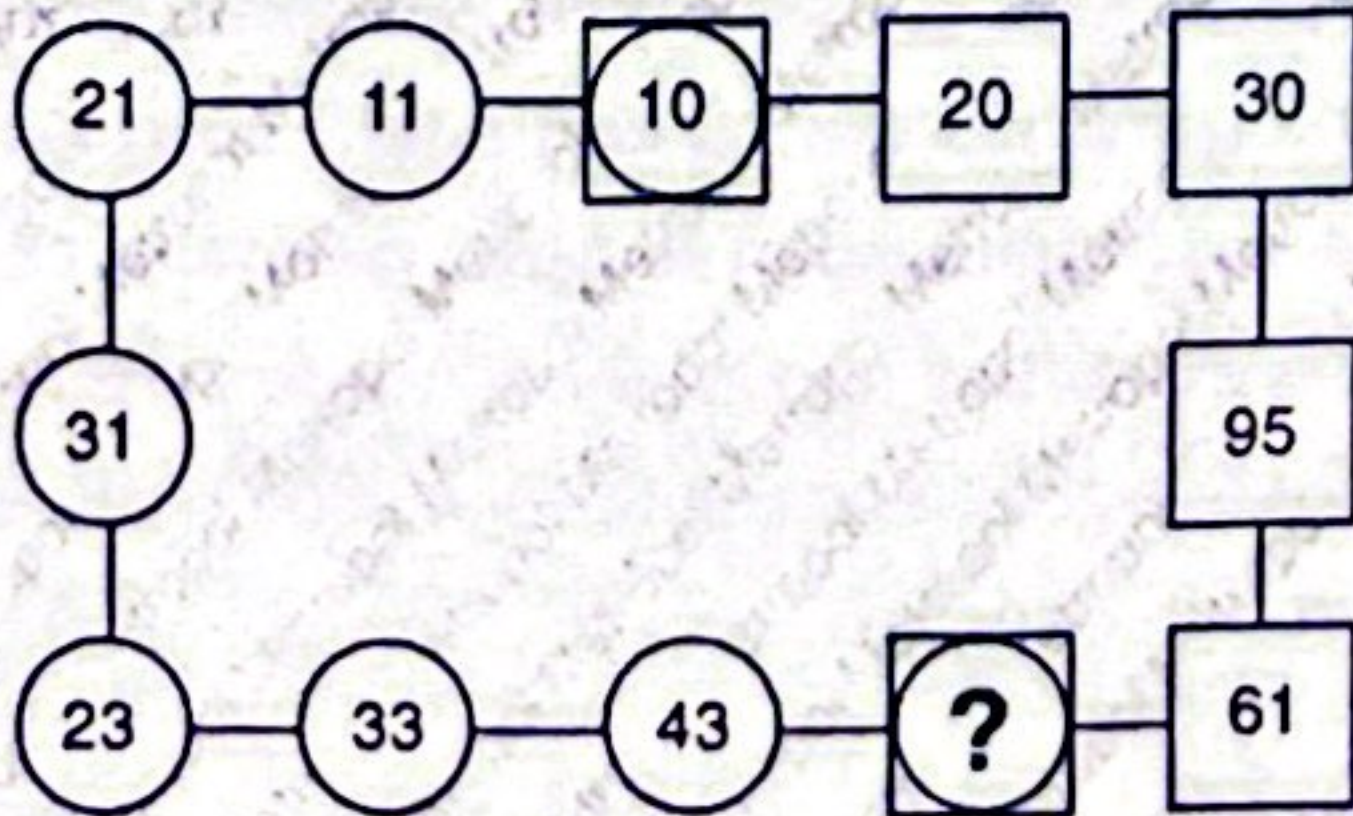
⇒ A + B = ?

Yukarıda verilen sayı dizisine göre A + B kaçtır?

What is the value of A + B according to the number series given?

- A) 113 B) 117 C) 120
D) 123 E) 125

33.



- A) 68 B) 69 C) 70 D) 71 E) 72

34. $\frac{9}{1}, \frac{16}{2}, \frac{23}{3}, \dots, \frac{198}{x}, \dots, \frac{240}{y}$

⇒ y - x = ?

Yukarıda verilen sayı dizisine göre y - x kaçtır?

With regard to the given number sequence, what is the value of y - x?

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

35. I. $a \bullet b = (a \blacksquare b) + 1$

II. $a \blacksquare b = (a \blacktriangle b) - 1$

III. $a \blacktriangle b = a - b + 1$

IV. $6 \bullet 3 = ?$

Yukarıdaki ilk üç eşitlikte $\bullet$, $\blacksquare$ ve $\blacktriangle$ işaretlerinin görevleri verilmiştir. Buna göre, dördüncü eşitlikteki soru işaretinin yerine aşağıdakilerden hangisi gelmelidir?

In the equations above, the functions of $\bullet$, $\blacksquare$ and $\blacktriangle$ are given. What does the question mark stand for in the fourth equation?

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

36. I. $a \blacktriangle b = a^b \blacksquare b^a$

II. $a \blacksquare b = a^a \bullet b^b$

III. $a \bullet b = \frac{b}{a}$

IV. $1 \blacktriangle 2 = ?$

Yukarıdaki ilk üç eşitlikte $\blacktriangle$, $\blacksquare$ ve $\bullet$ işaretlerinin görevleri verilmiştir. Buna göre, dördüncü eşitlikteki soru işaretinin yerine aşağıdakilerden hangisi gelmelidir?

In the equations above, the functions of $\blacktriangle$, $\blacksquare$ and $\bullet$ are given. What does the question mark stand for in the fourth equation?

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

37. I. $a \blacktriangle b = (a+b) + 3$
 II. $a \otimes b = (2a - b) + 1$
 III. $a \odot b = (a + 3b) - 2$
 IV. $[(4 \blacktriangle 3) \otimes 2] \odot 5 = ?$

Yukarıdaki ilk üç eşitlikte $\blacktriangle$, $\otimes$ ve $\odot$ işaretlerinin görevleri verilmiştir. Buna göre, dördüncü eşitlikteki soru işaretinin yerine aşağıdakilerden hangisi gelmelidir?

In the equations above, the functions of $\blacktriangle$, $\otimes$ and $\odot$ are given. What does the question mark stand for in the fourth equation?

- A) 29 B) 30 C) 31 D) 32 E) 33

38. I. $a \blacktriangle b = \left(\frac{a \odot b}{2}\right)$
 II. $a \odot b = \left(\frac{a \blacksquare b}{3}\right)$
 III. $a \blacksquare b = \left(\frac{a+b}{4}\right)$
 IV. $16 \blacktriangle 8 = ?$

Yukarıdaki ilk üç eşitlikte $\blacktriangle$, $\odot$ ve $\blacksquare$ işaretlerinin görevleri verilmiştir. Buna göre, dördüncü eşitlikteki soru işaretinin yerine aşağıdakilerden hangisi gelmelidir?

In the equations above, the functions of $\blacktriangle$, $\odot$ and $\blacksquare$ are given. What does the question mark stand for in the fourth equation?

- A) 1 B) 2 C) 4 D) 8 E) 16

39. I. $12 \star 14 = 23$
 II. $9 \star 8 = 14$
 III. $16 \star 5 = 18$
 IV. $7 \star 13 = ?$

Yukarıdaki dört eşitlikte $\star$ işaretinin görevi aynıdır. Buna göre, dördüncü eşitlikteki soru işaretinin yerine aşağıdakilerden hangisi gelmelidir?

In the equations above, the function of $\star$ remains unchanged. What does the question mark stand for in the fourth equation?

- A) 16 B) 17 C) 18 D) 19 E) 20

40. I. $2 \heartsuit 5 = 4, 10, 10$
 II. $3 \heartsuit 7 = 9, 14, 21$
 III. $4 \heartsuit 7 = 16, 14, 28$
 IV. $1 \heartsuit 2 = ?$

Yukarıdaki dört eşitlikte $\heartsuit$ işaretinin görevi aynıdır. Buna göre, dördüncü eşitlikteki soru işaretinin yerine aşağıdakilerden hangisi gelmelidir?

In the equations above, the function of $\heartsuit$ remains unchanged. What does the question mark stand for in the fourth equation?

- A) 1, 2, 4 B) 1, 4, 4 C) 1, 4, 2
 D) 1, 2, 3 E) 1, 3, 2

41. $x, y \in \mathbb{N}^+$,
 $96 \cdot x = y^3 \Rightarrow \min(x) = ?$

- A) 12 B) 18 C) 21 D) 27 E) 30

44. $\frac{1}{4} + \frac{2}{3} + \frac{3}{4} + \frac{4}{3} + \frac{5}{4} + \dots + \frac{18}{3} + \frac{19}{4} = ?$

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

42. (xyz) ve $(ab0)$ üç basamaklı sayılardır.
 (xyz) and $(ab0)$ are three-digit numbers

$$\begin{array}{r} x \ y \ z \\ x \quad \quad a \\ \hline 7 \ 4 \ 4 \end{array} \quad \begin{array}{r} x \ y \ z \\ x \quad \quad b \\ \hline 1 \ 2 \ 4 \ 0 \end{array}$$

$\Rightarrow (xyz) \cdot (ab0) = ?$

- A) 82600 B) 84900 C) 86800
D) 87600 E) 88800

45. $a, b, c \in \mathbb{Z}$
 $\frac{1}{a} < 0 < \frac{a-b}{b} < \frac{a-c}{c} \Rightarrow ? < ? < ?$

- A) $a < b < c$ B) $b < c < a$ C) $c < b < a$
D) $a < c < b$ E) $c < a < b$

43. $(n^2 + 7n + 12)(n + 2)! = 13 \cdot 12!$

$\Rightarrow \frac{(n+1)!}{n!} + \frac{(n-1)!}{(n-2)!} = ?$

- A) 16 B) 18 C) 20 D) 21 E) 22

46. $\frac{3x}{14} + \frac{y}{7} + \frac{2z}{28} = 1 \Rightarrow \frac{x}{2} + \frac{y}{3} + \frac{z}{6} = ?$

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

47. $\left(1-\frac{1}{4}\right) \cdot \left(1-\frac{1}{5}\right) \cdot \left(1-\frac{1}{6}\right) \cdot \dots \cdot \left(1-\frac{1}{36}\right) = ?$
 A) $\frac{1}{36}$ B) $\frac{1}{24}$ C) $\frac{1}{16}$ D) $\frac{1}{12}$ E) $\frac{1}{8}$

48. $2 - \frac{1}{2 - \frac{1}{2}} : \frac{2}{3} - \frac{1}{1 + \frac{1}{2}} = ?$
 A) $\frac{3}{4}$ B) $\frac{1}{3}$ C) $\frac{1}{2}$ D) $\frac{4}{3}$ E) $\frac{5}{3}$

49. $a, b, c \in \mathbb{Z}^+, c \neq 1$

$a + b = \frac{12}{c}$

$a > b$

$\Rightarrow \sum a = ?$

A) 11 B) 14 C) 15 D) 16 E) 17

50. $A, \frac{x}{4}, \frac{x}{12}, \frac{x}{15} \in \mathbb{Z}^+$

$\frac{x}{4} + \frac{x}{12} + \frac{x}{15} = A$

$\Rightarrow \min(A) = ?$

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

51. $x, y \in \mathbb{Z}^+$,
 $8^{x+1} = 125^{y-1}$
 $25^{x+1} = 4^{y-1}$
 $\Rightarrow x - y = ?$

A) -2 B) -1 C) 0 D) 1 E) 2

52. $\left. \begin{array}{l} 5^x = 7 \\ 7^y = 2 \end{array} \right\} \Rightarrow 7^{\frac{x+1}{x}} + 2^{\frac{y+1}{y}} = ?$

A) 49 B) 56 C) 63 D) 72 E) 81

53. $x \in \mathbb{Z}$,
 $\left(\frac{3}{5}\right)^{2x+2} > (0,6)^{x+13} \Rightarrow \max(x) = ?$

- A) 3 B) 7 C) 9
 D) 10 E) 12

56. $\frac{x}{2} = \frac{y}{3}, 2a = \frac{b}{9}$

$3x + 12a = y + 2b$

$\Rightarrow \frac{6a+x}{y-b} = ?$

- A) 2 B) 3 C) $\frac{8}{5}$ D) $\frac{11}{3}$ E) $\frac{13}{2}$

54. $\frac{(\sqrt{5}-\sqrt{2})^2 - (\sqrt{5}+\sqrt{2})^2}{\sqrt{20}} = ?$

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

57. $\frac{a-2}{b+3} = \frac{b+4}{c-1} = \frac{c+2}{a} = \frac{2}{3}$

$\Rightarrow \frac{a+8}{b+c} = ?$

- A) $\frac{2}{3}$ B) $\frac{3}{2}$ C) 1 D) 0 E) -1

55. $\sqrt[3]{\frac{28}{9^{2-x}} - 9^{x-2}} = 3 \Rightarrow x = ?$

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

58. $a, b, c \in \mathbb{N}^+$

$\frac{a+3}{4} = \frac{b+7}{9} = \frac{c+5}{7} \Rightarrow \frac{b+c}{a} = ?$

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

59. $2 - \{x - 3[x - 2(x - 2)]\} = 22$
 $\Rightarrow x = ?$

- A) -3 B) -2 C) -1 D) 1 E) 2

62. $x \in \mathbb{R}^+$
 $\sqrt{x} + x = 8 \Rightarrow \sqrt{9x + x\sqrt{x}} = ?$

- A) $\sqrt{3}$ B) $2\sqrt{2}$ C) $3\sqrt{2}$ D) 8 E) 9

60. $1 + \frac{3 - \frac{x+1}{4}}{2} = 3 \Rightarrow x = ?$

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

63. $0 < a < b$
 $\left(\frac{24a+3b}{4b}\right) \in \mathbb{Z}$
 $\Rightarrow \sum \left(\frac{24a+3b}{4b}\right) = ?$

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

61. $a + 2b = 15,$
 $2c - d = 3$
 $b - c = 5$
 $\Rightarrow a + d = ?$

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

64. $|\sqrt{3} - 2| - |2\sqrt{3} - 3\sqrt{2}| + |1 - \sqrt{2}| - |\sqrt{3} - \sqrt{2}| = ?$

- A) 0 B) $1 + \sqrt{2}$ C) $\sqrt{3} - 1$
D) $1 - \sqrt{2}$ E) $-\sqrt{2}$

65. $|x| = -x$
 $y^2 < y$
 $\Rightarrow |x - y| - \sqrt{x^2} - \sqrt{y^2} + 3|x| = ?$

- A) $-3x$ B) $-2x$ C) 0 D) $2x$ E) $3x$

68. $x \neq y,$
 $\frac{x}{y} = \frac{6+5x^2}{6+5y^2} \Rightarrow x \cdot y = ?$

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

66. $x, y \in \mathbb{Z}$
 $|x| \cdot |y| = 24$
olduğuna göre kaç farklı (x, y) ikilisi yazılabilir?
 Since $|x| \cdot |y| = 24$ how many different (x, y) pair can be written.

- A) 32 B) 28 C) 24
 D) 16 E) 12

69. $\begin{cases} xy = y + 27 \\ x^2y = y + 81 \end{cases} \Rightarrow y = ?$

- A) 31 B) 27 C) 24 D) 21 E) 18

67. $x, y \in \mathbb{R}^+, (x \neq y)$

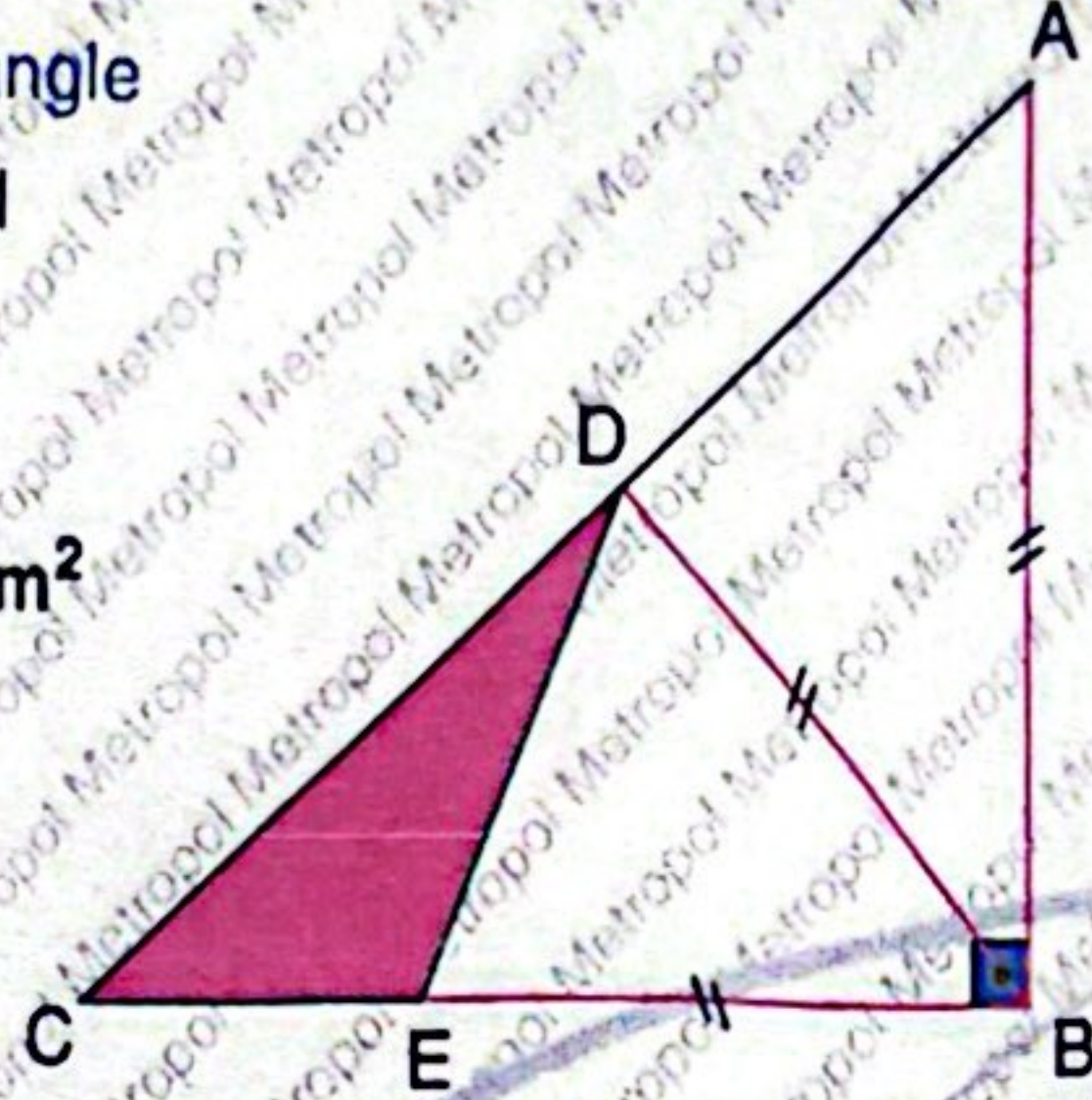
$$\frac{\sqrt{x}}{y-x} = \frac{1}{\sqrt{x}+\sqrt{y}} \Rightarrow y = ?$$

- A) $4x^2$ B) $2x^2$ C) x^2
 D) $2x$ E) $4x$

70. $a + \sqrt{a} = 17 \Rightarrow a + \frac{17}{\sqrt{a}} = ?$

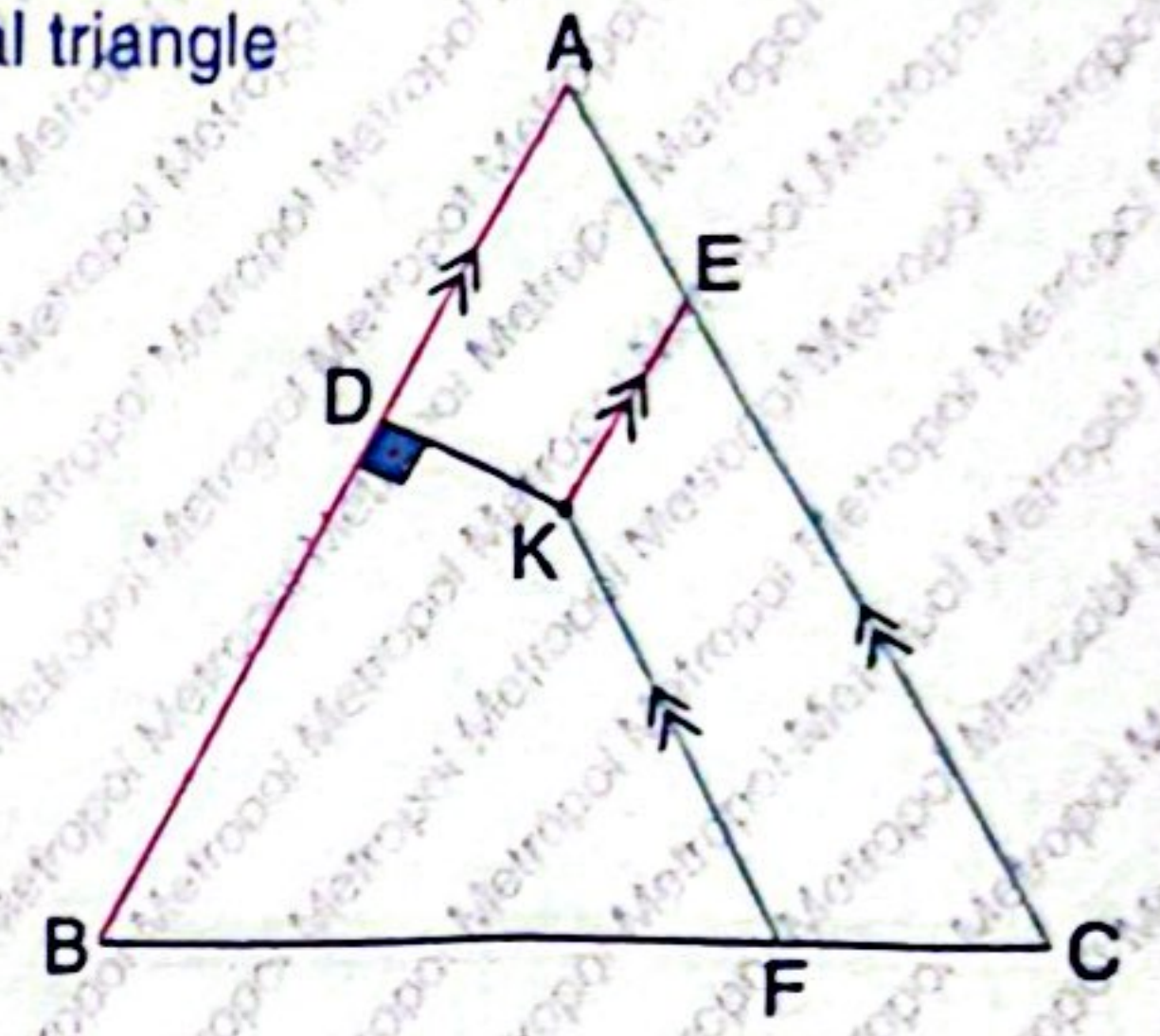
- A) 7 B) 10 C) 17 D) 18 E) 19

71. $\widehat{ABC}$ bir dik üçgen
 $\widehat{ABC}$ is a right triangle
 $|BE| = |BD| = |BA|$
 $|CD| = 6\sqrt{2}$ cm
 $|DE| = 5$ cm
 $\Rightarrow A(\widehat{DCE}) = ? \text{ cm}^2$



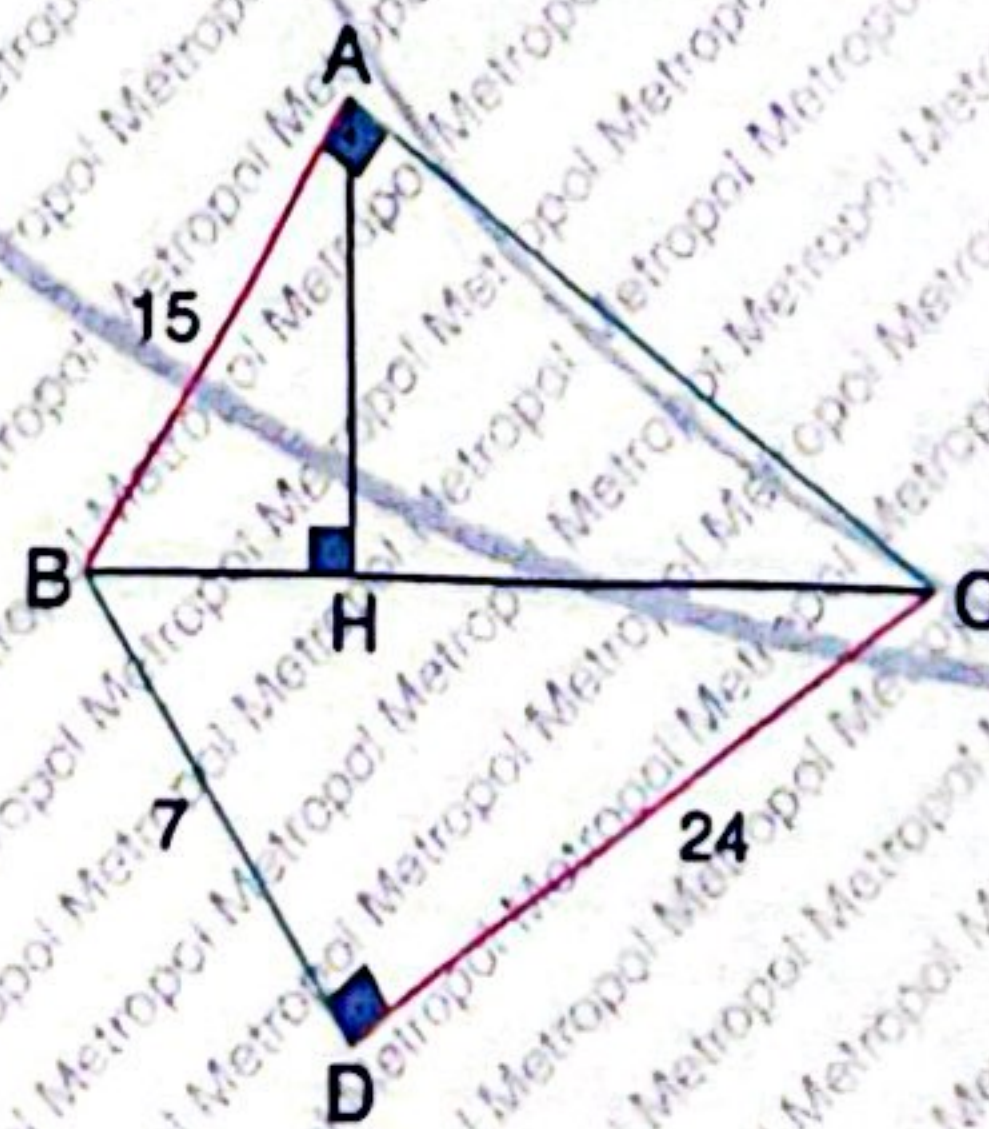
- A) $12\sqrt{2}$ B) 15 C) $16\sqrt{2}$ D) 18 E) 30

73. $\widehat{ABC}$ bir eşkenar üçgen
 $\widehat{ABC}$ is an equilateral triangle
 $[KD] \perp [AB]$
 $[KE] \parallel [AC]$
 $[KF] \parallel [BC]$
 $A(\widehat{ABC}) = 81\sqrt{3}$ cm²
 $|KE| = 6$ cm
 $|KF| = 8$ cm
 $\Rightarrow |DK| = ?$ cm



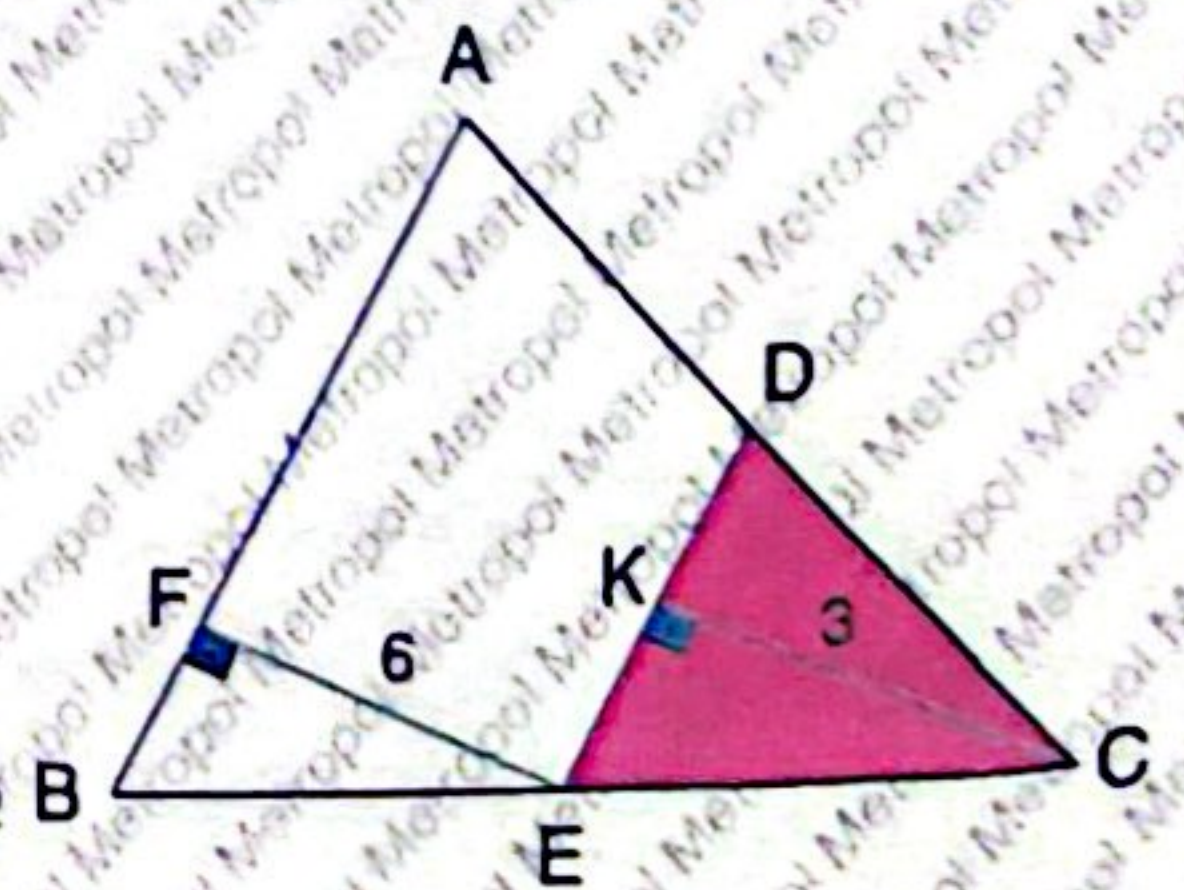
- A) $\sqrt{3}$ B) 2 C) 3 D) $2\sqrt{3}$ E) 4

72. $\widehat{ABC}$ ve $\widehat{BDC}$
birer dik üçgen
 $\widehat{ABC}$ and $\widehat{BDC}$ are
right triangles
 $[BA] \perp [AC]$
 $[BD] \perp [DC]$
 $[AH] \perp [BC]$
 $|AB| = 15$ cm
 $|BD| = 7$ cm
 $|DC| = 24$ cm
 $\Rightarrow |AH| + |HC| = ?$ cm



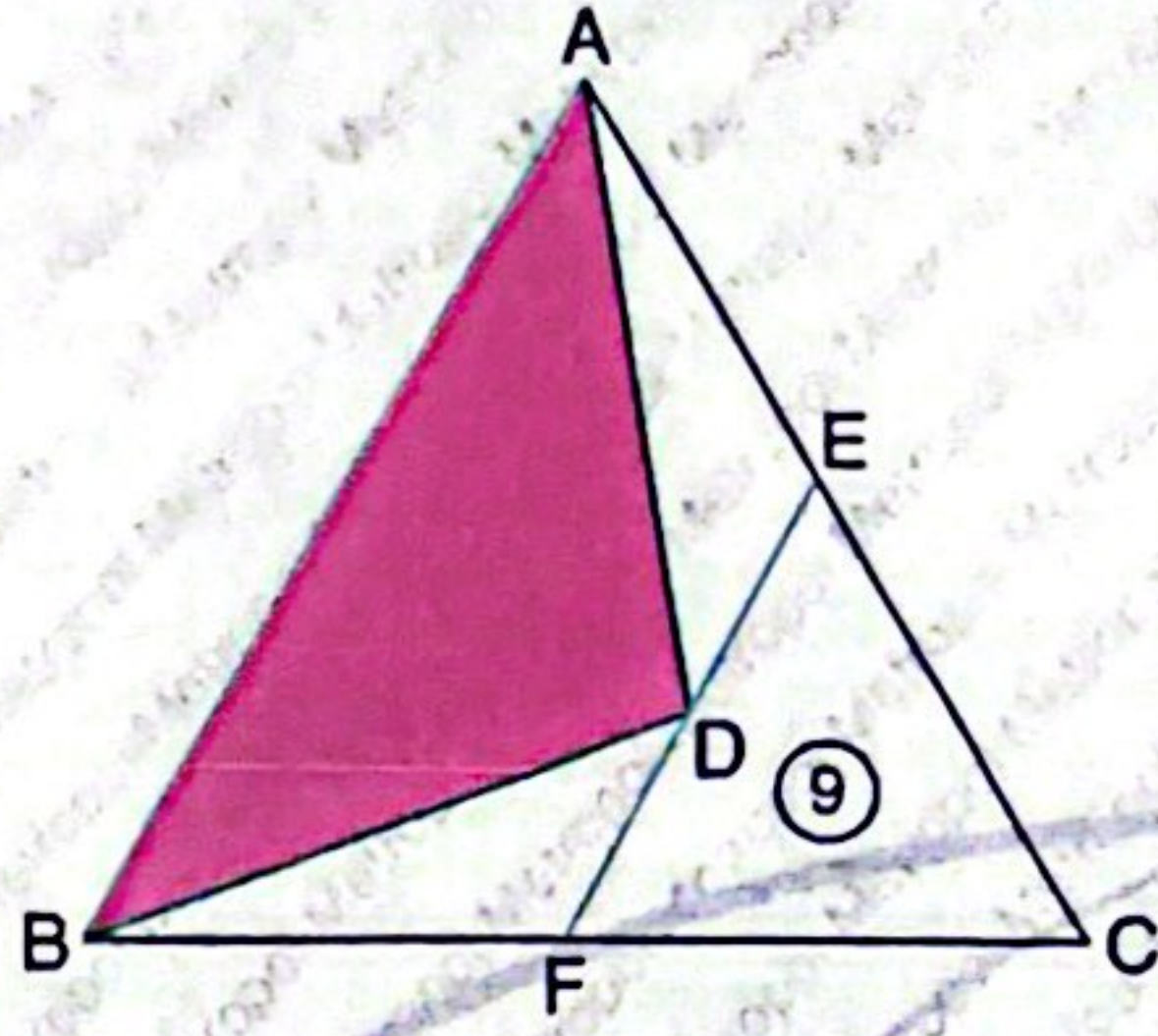
- A) 12 B) 16 C) 20 D) 24 E) 28

74. $[AB] \parallel [DE]$
 $[CK] \perp [ED]$
 $[EF] \perp [AB]$
 $|CK| = 3$ cm,
 $|EF| = 6$ cm
 $|AB| = 16$ cm
 $\Rightarrow A(\widehat{DEC}) = ? \text{ cm}^2$



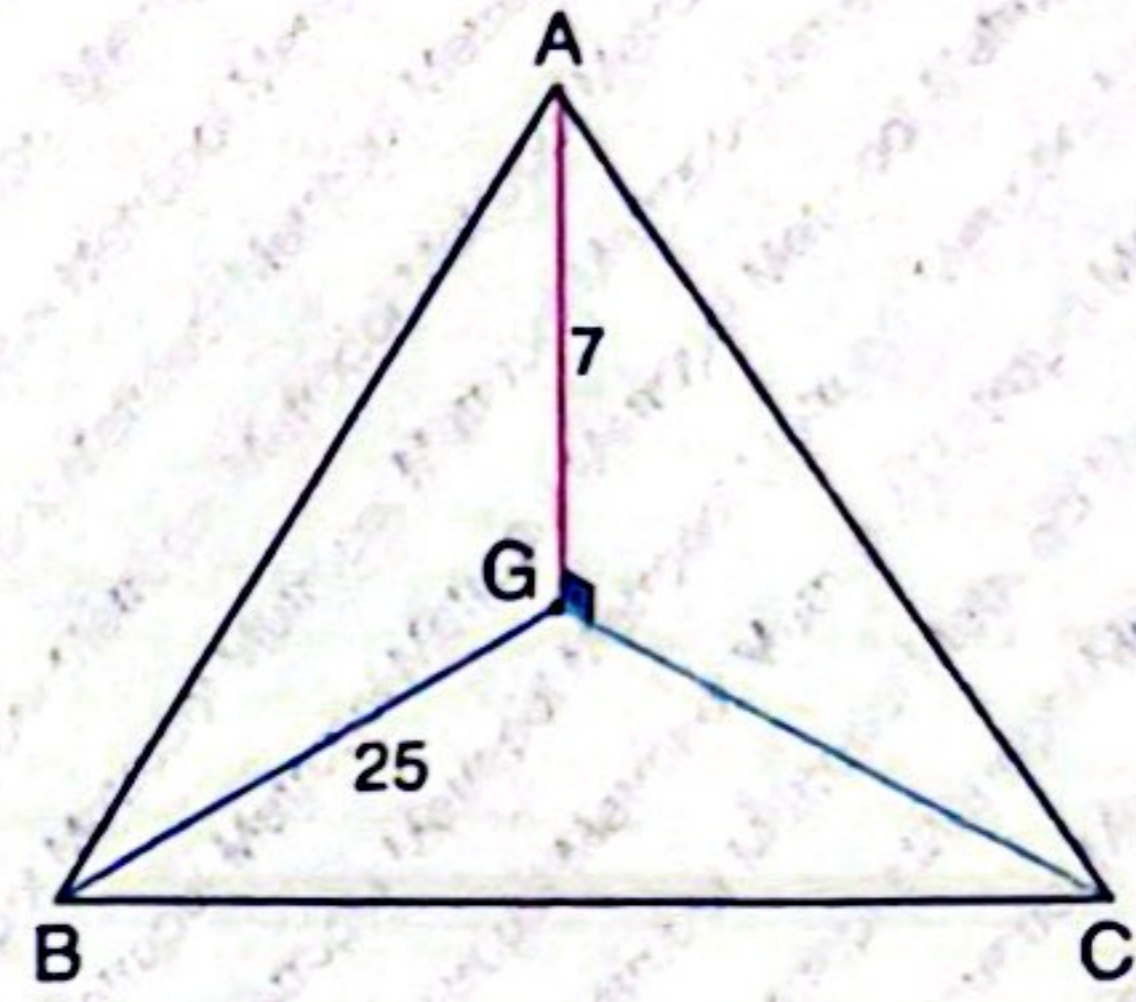
- A) 4 B) 6 C) 8 D) 16 E) 24

75. $\triangle ABC$ bir üçgen
 $\triangle ABC$ is a triangle
 $IEF \parallel [AB]$
 $3|AE| = 2|EC|$
 $A(\widehat{FEC}) = 9 \text{ cm}^2$
 $\Rightarrow A(\widehat{BAD}) = ? \text{ cm}^2$



- A) 6 B) 9 C) 10 D) 12 E) 15

77.

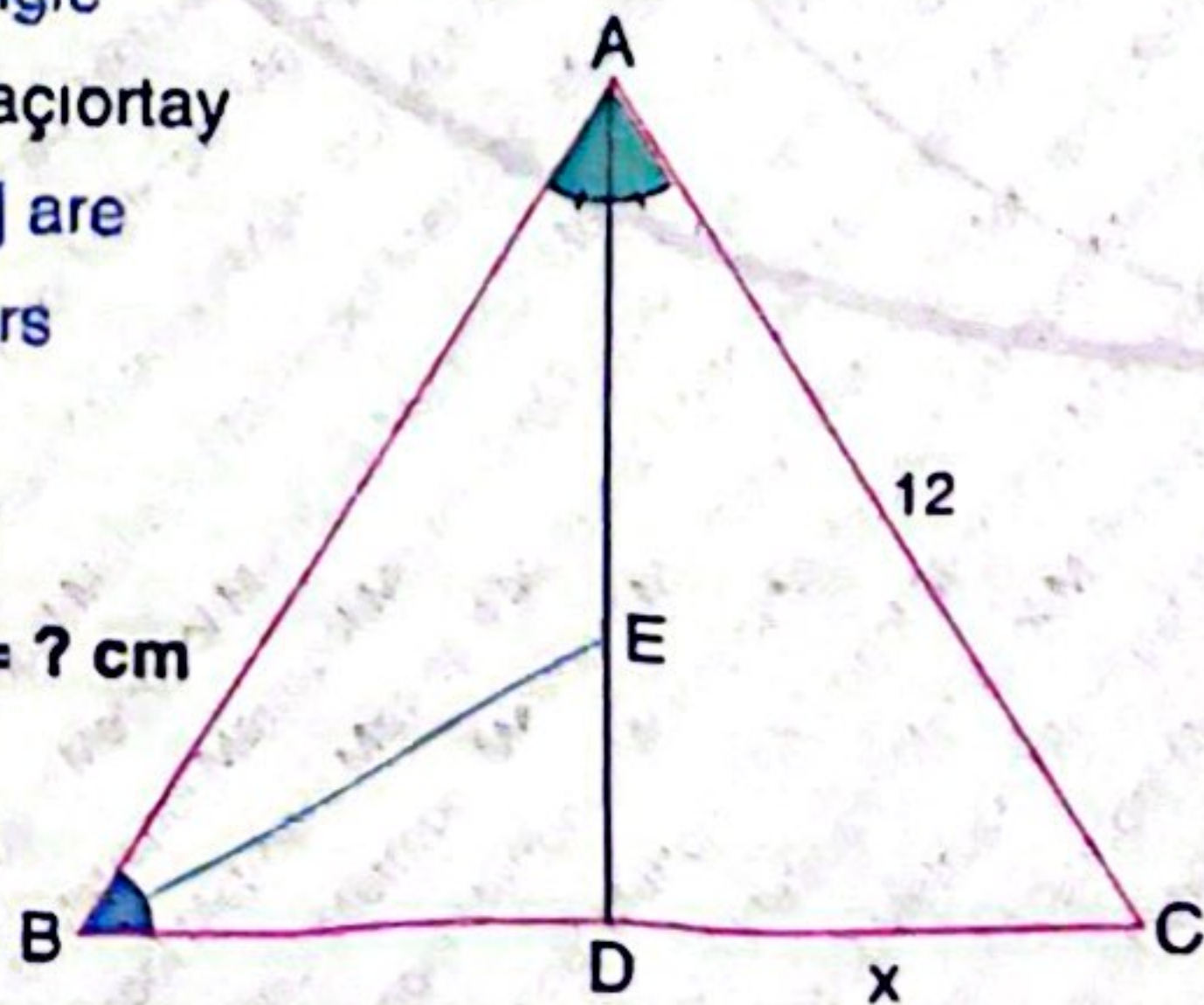


- G noktası şekildeki ABC üçgeninin ağırlık merkezidir.
 Point G is the center of gravity in the ABC triangle.
 $[AG] \perp [GC]$, $|AG| = 7 \text{ cm}$, $|BG| = 25 \text{ cm}$
 $\Rightarrow |GC| = ? \text{ cm}$

- A) 12 B) 16 C) 18 D) 24 E) 25

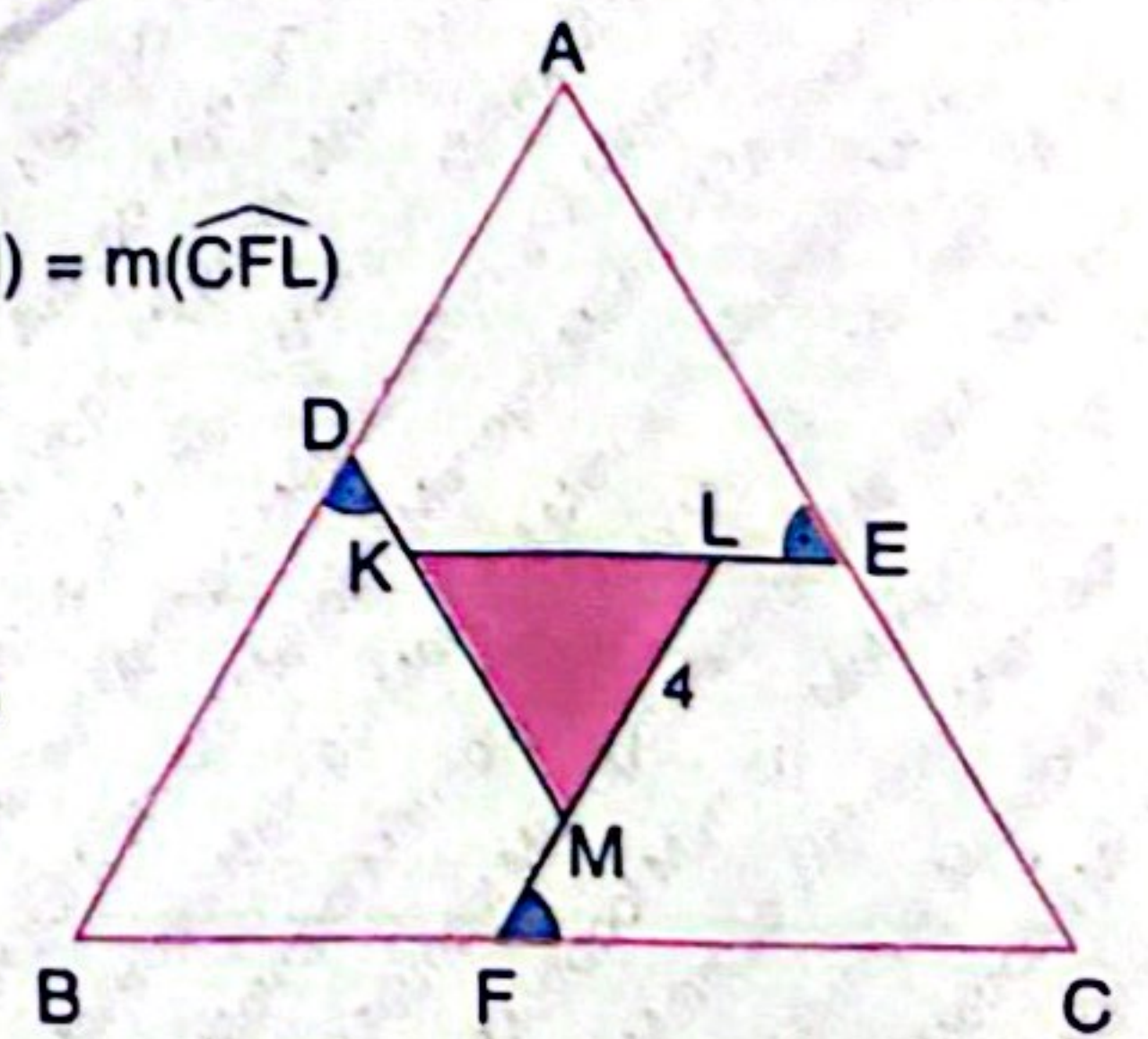
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76. $\triangle ABC$ bir üçgen.
 $\triangle ABC$ is a triangle
 $[AD]$ ve $[BE]$ açıortay
 $[AD]$ and $[BE]$ are angle bisectors
 $|AE| = 2|DE|$,
 $|AC| = 12 \text{ cm}$
 $\Rightarrow |CD| = x = ? \text{ cm}$



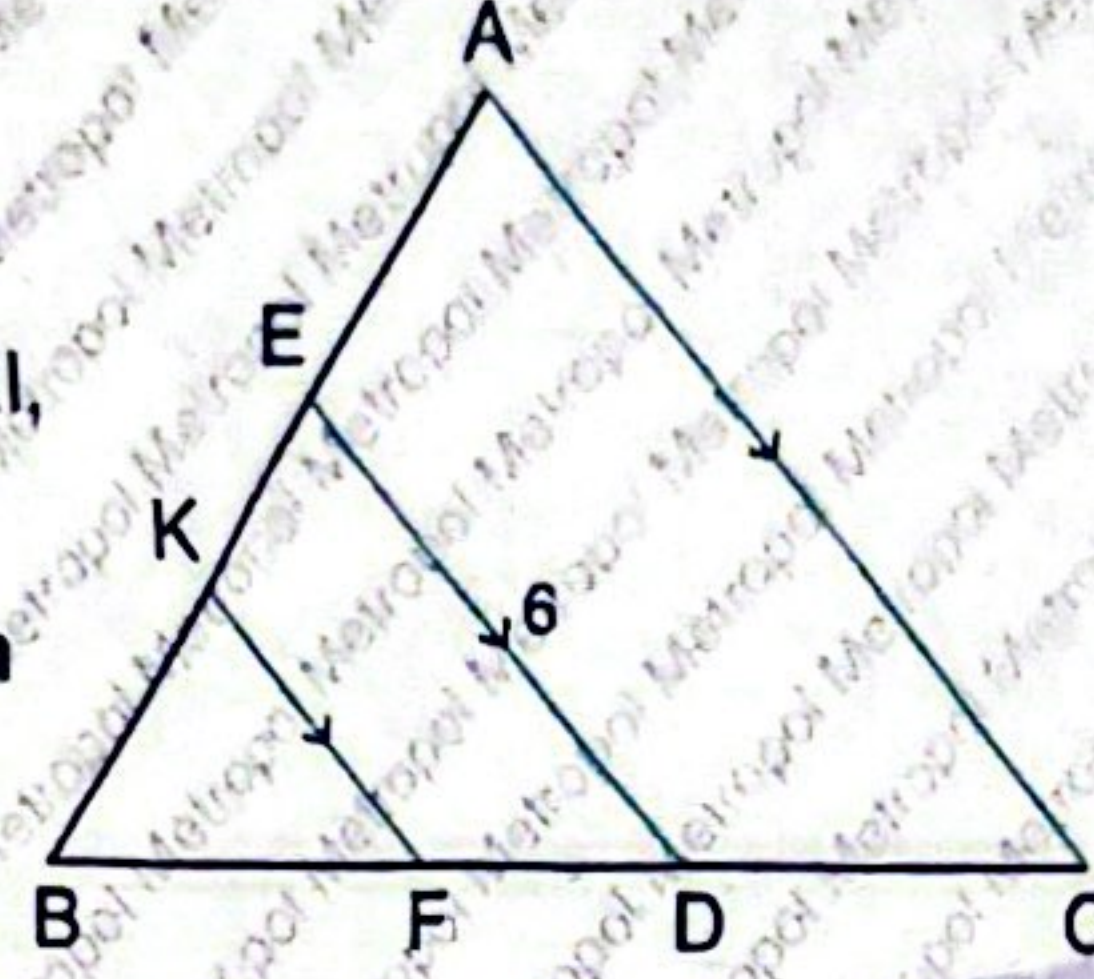
- A) 8 B) 7 C) 6 D) 5 E) 4

78. $\triangle ABC$ bir üçgen
 $\triangle ABC$ is a triangle
 $m(\widehat{AEK}) = m(\widehat{BDM}) = m(\widehat{CFL})$
 $|LM| = 4 \text{ cm}$
 $|BC| = 20 \text{ cm}$
 $\Rightarrow \frac{A(\widehat{KLM})}{A(\widehat{ABC})} = ?$



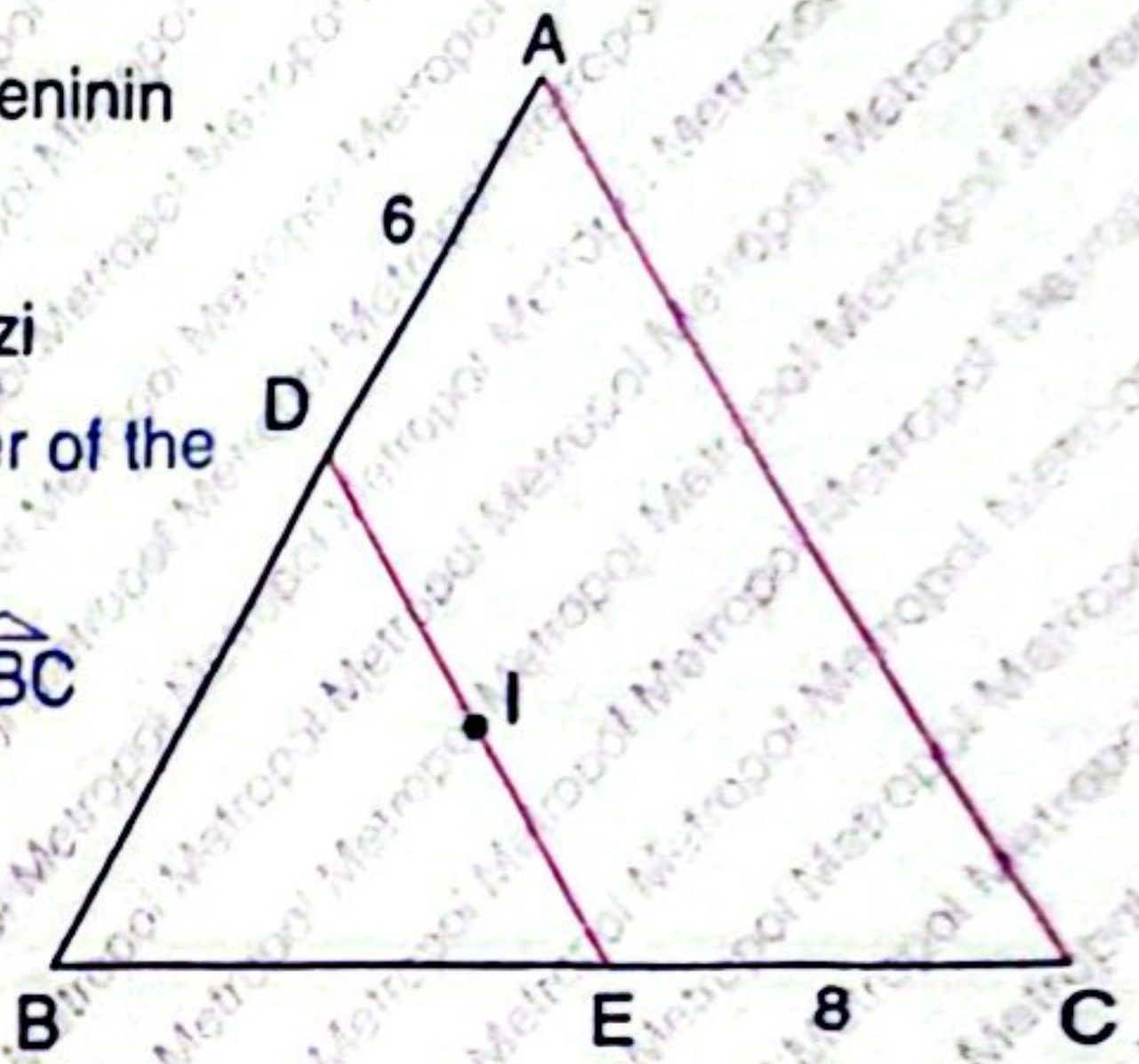
- A) $\frac{1}{4}$ B) $\frac{16}{25}$ C) $\frac{1}{25}$ D) $\frac{1}{5}$ E) $\frac{1}{3}$

79. $\triangle ABC$ bir üçgen
 $\triangle ABC$ is a triangle
 $[KF] \parallel [ED] \parallel [AC]$,
 $2 \cdot BK = 2 \cdot KE = AE$,
 $IEDI = 6$ cm
 $\Rightarrow IKFI + IACI = ?$ cm



- A) 8 B) 10 C) 12
D) 15 E) 18

80. I noktası $\triangle ABC$ üçgeninin
iç teğet
çemberinin merkezi
Point I is the center of the
inner tangent
circle of triangle $\triangle ABC$
 $[DE] \parallel [AC]$
 $ADI = 6$ cm
 $ICEI = 8$ cm
Çevre/Perimeter $(BDE) \in Z$
 $\Rightarrow \min[\text{Çevre/Perimeter } (BDE)] = ?$



- A) 28 B) 29 C) 30 D) 31 E) 32

TEST BİTTİ. CEVAPLARINIZI KONTROL EDİNİZ.

BAŞARILARI!

END OF TEST. CHECK YOUR ANSWERS.

GOOD LUCK!