istanbul
ÜNiVERSITESI YÖS SORULARI

2014
1.

$$
\begin{aligned}
& \left(\mathrm{a}^{2}-4,12-\mathrm{b}^{2}\right)=(12,8) \\
& \mathrm{a}, \mathrm{~b} \in \mathbb{Z}^{+} \\
& \mathrm{a}+\mathrm{b}=?
\end{aligned}
$$

A) 4
B) 6
C) 8
D) 10
E) 12
2.

$$
\frac{6!-4!}{3!}=?
$$

A) 720
B) 696
C) 116
D) 20
E) 16
3.

$$
\frac{0, \overline{3}+0, \overline{7}+0, \overline{1}}{0, \overline{6}-1, \overline{3}+0, \overline{5}}=?
$$

A) -11
B) -9
C) $\frac{11}{9}$
D) 9
E) 11
4.

$$
\begin{aligned}
& \sqrt[3]{x-2}+\sqrt[3]{8 x-16}=6 \\
& x=?
\end{aligned}
$$

A) 6
B) 8
C) 10
D) 12
E) 14
5.

$$
\sqrt{\frac{27}{4}}+\sqrt{\frac{3}{4}}-\sqrt{\frac{75}{4}}=?
$$

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

$$
\frac{2^{2002}+2^{2001}+2^{2000}}{2^{-2000}+2^{-20003}+2^{-2002}}=?
$$

A) $2^{3000}$
B) $2^{2001}$
C) $2^{2002}$
D) $2^{2000}$
E) $2^{2064}$
E) $2^{2064}$

11.
$2(x-1)-3=4-3(2-3 x)$
$x=$ ?
A) -1
B) $-\frac{7}{11}$
C) $-\frac{3}{7}$
D) $-\frac{3}{11}$
E) 1
12.
$f(x)=m x^{2}+6 x-n$
$\mathrm{f}\left(\mathrm{x}_{1}\right)=\mathrm{f}\left(\mathrm{x}_{2}\right)=0$
$x_{1}=x_{2}$
m. $n=$ ?
A) -11
B) -10
C) -9
D) -8
E) -7
13.

$f(-2)=0$
$f(0)=6$
$f(4)=$ ?
A) 14
B) 16
C) 18
D) 21
E) 24
14.

$$
\begin{aligned}
& f(2 x+a)=\frac{x+6}{x+4} \\
& f(3)=3 \\
& a=?
\end{aligned}
$$

A) 9
B) 5
C) 3
15.
$\log _{x} 2=\log _{2 x} 8$
$\mathrm{x}=$ ?
A) $\frac{1}{\sqrt{2}}$
B) $\sqrt{2}$
C) 2
D) $2 \sqrt{2}$
E) 4
17.

$$
f(x)= \begin{cases}3 x-2, & x<1 \\ 4 x+1, & 1<x<4 \\ 3 x-2, & x>4\end{cases}
$$

$\lim _{x \rightarrow 1^{+}} f(x)+\lim _{x \rightarrow 4^{-}} f(x)=?$
A) 22
B) 24
C) 26
D) 28
E) 30
16.
$\frac{2}{\log _{3} 45}+\frac{1}{\log _{5} 45}=?$
18.
$\lim _{x \rightarrow 0^{+}}\left(\left(\frac{7}{2}\right)^{x}+\left(\frac{9}{10}\right)^{\frac{1}{x}}+2\right)=$ ?
A) $\frac{1}{2}$
B) 1
C) $\frac{3}{2}$
D) 2
E) $\frac{5}{2}$
19.

$$
\frac{\mathrm{d}^{2}}{\mathrm{dx}^{2}}\left[5 \mathrm{x}^{2}-2 \mathrm{x}+3\right]=?
$$

A) $2 x$
B) $3 x$
C) 4
D) 5
E) 10
20.

$$
3 z+2 i=\bar{z}-3 \Rightarrow|z|=?
$$

A) $\frac{\sqrt{5}}{2}$
B) $\sqrt{2}$
C) $\frac{3}{2}$
D) $\frac{\sqrt{10}}{2}$
E) $\sqrt{3}$
21.
$f(x)=e^{\text {sing }} \tan x$
$f^{\prime}(x)=$ ?
A) $f^{\prime}(x)=e^{\sin x}\left(\sin x+\tan ^{2} x\right)$
B) $f^{\prime}(x)=e^{\sin x}\left(\sin x+\sec ^{2} x\right)$
C) $\mathrm{f}^{\prime}(\mathrm{x})=\mathrm{e}^{\mathrm{sin} x}\left(\sin x+\operatorname{cosec}^{2} x\right)$
D) $f^{\prime}(x)=e^{\operatorname{tin} x}\left(\sin x-\sec ^{2} x\right)$
E) $f^{\prime}(x)=e^{\sin x}\left(\sin x-\tan ^{2} x\right)$
22.

$$
\begin{aligned}
& f(x)=\left[2+\left(x^{2}-x-1\right)^{3}\right]^{2} \\
& f^{\prime}(2)=?
\end{aligned}
$$

A) 60
B) 54
C) 48
23.
$\int_{2}^{10}|2 x-8| d x=?$
A) 0
B) 20
C) 40
D) 45
E) 60
24.
$-3 \int \cos ^{2} x \sin x d x=?$
A) $\cos ^{3} x+c$
B) $\sin ^{3} x+c$
C) $\cos ^{2} x+c$
D) $\sin ^{2} x+c$
E) $\sin ^{3} x \cos ^{3} x+c$
25.
$\int \frac{-\tan x d x}{\ln (\cos x)}=?$
A) $\ln |\ln (\cot x)|+c$
B) $\ln \ln (\tan x) \mid+c$
C) $\ln \ln (\sin x)+c$
D) $\ln |\ln (\cos x)|+c$
26.

$$
\prod_{k=4}^{12}\left(\frac{k-3}{k-2}\right)=?
$$

A) $\frac{1}{8}$
B) $\frac{1}{9}$
C) $\frac{1}{10}$
D) $\frac{1}{11}$
E) $\frac{1}{12}$
27.

$$
\begin{aligned}
& \pi<x<\frac{3 \pi}{2}, \sin 2 x+\sin x=0 \\
& x=?
\end{aligned}
$$

A) $\frac{7 \pi}{6}$
B) $\frac{5 \pi}{4}$
C) $\frac{4 \pi}{3}$
$\begin{array}{ll}\text { D) } \frac{7 \pi}{5} & \text { E) } \frac{8 \pi}{5}\end{array}$
E) $\ln |\ln (\sec x)|+c$
28.


$$
\begin{aligned}
& |\mathrm{AC}|=|\mathrm{DC}|=5 \\
& |\mathrm{AD}|=6 \\
& \mathrm{~m}(\mathrm{ADB})=\mathrm{x} \\
& \sin \mathrm{x}=?
\end{aligned}
$$

A) $-\frac{4}{5}$
B) $-\frac{3}{5}$
C) $\frac{1}{5}$
D) $\frac{3}{5}$
E) $\frac{4}{5}$
29.

A) $(A \cup B) \cap C^{\prime}$
B) $A \backslash(C \backslash B)$
C) $(A \backslash C) \cup(C \cap B)$
D) $\mathrm{A} \backslash(\mathrm{B} \cap \mathrm{C})$
D) AlB
30.


$$
\begin{aligned}
& \mathrm{m}\left(\widehat{\mathrm{ADC})} \mid=90^{\circ}\right. \\
& \mid \mathrm{AC}=8 \\
& |\mathrm{AB}|=4 \\
& |\mathrm{BC}|=10
\end{aligned} \quad|\mathrm{BD}|=\mathrm{x}=?
$$

A) $\frac{5}{4}$
B) $\frac{11}{7}$
C) 2
D) $\frac{13}{5}$
E) 7
E) $(A \cup B) \cup C$
31.

$|\mathrm{AD}|=|\mathrm{DB}|=6, \mathrm{~m}(\widehat{\mathrm{~A}})=90^{\circ}$.
$\mathrm{m}(\widehat{\mathrm{CDB}})=150^{\circ},|\mathrm{BC}|=\mathrm{x}=$ ?
A) $2 \sqrt{3}$
B) $4 \sqrt{3}$
C) $2 \sqrt{13}$
D) $2 \sqrt{39}$
E) $12 \sqrt{3}$
32.


$$
\begin{aligned}
& |\mathrm{AD}|=5 \\
& |\mathrm{BD}|=3 \quad \mathrm{~A}(\mathrm{ADC})=?
\end{aligned}
$$

$$
|\mathrm{DC}|=6
$$

A) 6
B) 12
C) 15
D) 18
E) 30
33.


$$
\begin{aligned}
& \mathrm{m}(\mathrm{AFB})=60^{\circ} \\
& \mathrm{m}(\mathrm{CAD})=90^{\circ} \\
& \mathrm{EC} \mid=12 \\
& \mathrm{AC}|=| \mathrm{BD} \\
& \mathrm{AD} \mid=?
\end{aligned}
$$

A) 5
B) 6
C) $4 \sqrt{3}$
D) $5 \sqrt{3}$
E) $6 \sqrt{3}$
34.


$$
\mathrm{m}(\hat{\mathrm{~A}})=\mathrm{m}(\hat{\mathrm{~B}})=\mathrm{m}(\hat{\mathrm{C}})=\mathrm{m}(\hat{\mathrm{D}})=90^{\circ}
$$

$$
\begin{aligned}
& |\mathrm{DH}|=4 \\
& |\mathrm{HK}|=5 \\
& |\mathrm{CK}|=\mathrm{x}=?
\end{aligned}
$$

A) 4
B) 5
C) 6
D) 7
E) 8
35.

$|A D|=12$
$|\mathrm{BC}|=4$
$|\mathrm{DC}|=2|\mathrm{AB}|$
$\mathrm{AC} \perp \mathrm{BD} \Rightarrow|\mathrm{AB}|=$ ?
A) $2 \sqrt{2}$
B) 4
C) $4 \sqrt{2}$
D) 6
E) $8 \sqrt{2}$

## 36. ve 37. sorularda, I. gruptakI kümelerin şekilleri birer rakamla gösterilerek II. gruptaki sayilar elde edilmiştir. Soru işaretiyle belirtilen kümenin hangi sayıyla gōsterildiğini bulunuz.

In questions 36 and 37 , the numbers In group Il stand for the sets of figures In group I, when each figure has been coded with a speclfic numeral. Find the number which corresponds to the set of the flgures indicaled by the question mark.
36.
$\left.\begin{array}{llll}\boldsymbol{c} \text { I. } & \\ \otimes & \Delta & \Omega & \theta \\ \psi & 0 & \Delta & \Omega \\ \Omega & \theta & \Psi & \otimes \\ 0 & \Omega & \otimes & \Delta \\ \theta & \otimes & \Psi & 0\end{array}\right\} \quad\left\{\begin{array}{ccc}\text { II. } \\ 1234 & 2436 & 3651 \\ 4512 & 6145 & \\ & \end{array}\right.$
$\Psi \theta \Omega \Delta=?$
A) 1235
B) 2346
C) 3215
I.
$\begin{array}{ll}\text { D) } 7139 & \text { E) } 9721\end{array}$
37.

| I. | II. |  |  |
| :---: | :---: | :---: | :---: |
| $\oplus \triangle \otimes$ |  |  |  |
| $\Gamma \quad \triangle$ ¢ | 1987 | 3189 | 7392 |
| $\emptyset \Theta \Gamma \oplus$ | 8722 | 9231 |  |
| 中 $\varnothing \oplus \Delta$ |  |  |  |
| $\Theta \oplus \Gamma \oplus$ |  |  |  |

$\Theta \Phi \oplus \Delta=?$
A) 1279
B) 1792
C) 2197

8723 9231
7392
$\begin{array}{ll}\text { D) } 4521 & \text { E) } 6132\end{array}$

METROPOL
مترويل وزرا

## 38. ve 39. sorularda, I. gruptaki sözcäklerin harfleri birer rakamla gösterilerek II. gruptaki sayilar elde edilmiş̧tir. Soru işaretiyle belirtilen sõzcügứn hangi sayıyla gösterildiğini bulunuz.

In questions 38 and 39 , the numbers In group II sland for the words in group 1, when each lenter has been coded with a specific numeral. Find the number which corresponds to the word indicaled by the question mark.
38.

## I.


39.
I.

PIDE DEAH I DEH AHPI HPED

APDI=?
A) 1345
B) 1435
C) 3546

$\begin{array}{lll}1235 & 2364 & 3546\end{array}$
46125462
E) 5346
D) 4365
$\mathrm{SEKO}=$ ?
A) 4895
B) 5874
C) 6985
D) 7694
E) 9874
40.

| $\Delta$ | a | b | c | d | e | $\left(x^{-1} \Delta c\right) \Delta\left(13^{-1} \Delta a\right)=d$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| a | b | c | d | c | a |  |
| b | c | d | e | a | b |  |
| c | d | c | a | b | c | $\mathrm{x}=$ ? |
| d | e | a | b | c | d |  |
| e | a | b | c | d | e |  |

A) a B) b
C) c
D) d
E) e
41. ve 42. soruları aşağıdaki tabloys göre cevaplayınız.

Answer the questions 41 and 42 according to the table below.

Tabloda s işleminin görevi belirlenmiştir.
The function of $\theta$ in the table is deflned.

| 0 | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{1}$ | 1 | 2 | 3 | 4 | 5 |
| $\mathbf{2}$ | 2 | 1 | 4 | 3 | 5 |
| $\mathbf{3}$ | 3 | 4 | $\mathbf{1}$ | 2 | 5 |
| $\mathbf{4}$ | 4 | 3 | 2 | 1 | 5 |
| $\mathbf{5}$ | 5 | 5 | 5 | 5 | 5 |

Örnekler:
Examples:
$203=4$
$102=2$
41.
$(302) 0(403)=$ ?
A) 1
B) 2
C) 3
D) 4
E) 5
42.

$$
(x 02) 02=3 \quad \Rightarrow \quad x=?
$$

A) 1
B) 2
C) 3
D) 4
E) 5
43.

| + | $\mathbf{a}$ | $\mathbf{b}$ | $\mathbf{c}$ |
| :---: | :---: | :---: | :---: |
| $\mathbf{a}$ |  |  |  |
| $\mathbf{b}$ |  | $6-\mathbf{c}$ |  |
| $\mathbf{c}$ |  | 5 | $2 \mathbf{a}-8$ |

Vukaridaki toplama tablosunda a, b ve c harflerl birer sayinin yerine kullanilmıștır. Buna gōre, a kaçtır?

In the addilion lable above, the letters $a, b$ and $c$ each stand for a number. Accordingly, what is the value of a?
A) 5
B) 6
C) 7
D) 8
E) 9
44.

| + | $\mathbf{a}$ | $\mathbf{b}$ |
| :---: | :--- | :--- |
| $\mathbf{a}$ |  | 4 |
| $\mathbf{b}$ |  |  |


| $X$ | $a$ | $b$ |
| :---: | :---: | :---: |
| $a$ |  |  |
| $b$ | 2 |  |

Vukaridaki çarpma ve toplama tablolarinda a ve b harfieri pozitif birer saymin yerine kullanilmıştır. Buna göre, $(\mathrm{a}-\mathrm{b})^{2}$ kaçtir?

In the addition table above, the letters
a and beach stand for a number.
Accordingly, what is the value of $(a-b)^{2}$ ?
A) 3
B) 4
C) 5
D) 6
E) 8
45.

| $\mathbf{X}$ | $\mathbf{a}$ | $\mathbf{b}$ | $\mathbf{c}$ |
| :---: | :---: | :---: | :---: |
| $\mathbf{a}$ |  | 4 c |  |
| $\mathbf{b}$ |  |  | 9 a |
| $\mathbf{c}$ |  |  |  |

Yukaridaki toplama tablosunda $a, b$ ve c harfleri pozitif birer sayinin yerine kullanilmıştur. Buna göre, b kaçtır?

In the aoditition table above, the letters a, $b$ and $c$ each stand for a number. Accordingly, what is the value of $b$ ?
A) 4
B) 6
C) 8
D) 9
E) 12
46.

| $\Delta$ | $\star$ | $\cap$ | $\Delta$ | $\square$ | $n$ | $\star$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\cap$ | $\neg$ | $\Delta$ | $\bullet$ | $\cap$ | $\oplus$ | $\star$ |
| $\star$ | $\Delta$ | $\oplus$ | $\bullet$ | $\Delta$ | $\bullet$ | $\Delta$ |
| $\cap$ | $\oplus$ | $\star$ | $\Delta$ | $\oplus$ | $\star$ | $\cap$ |
| $\square$ | $\square$ | $\cap$ | $\llcorner$ | $\cdot$ | $\Delta$ | $\oplus$ |
| $\star$ | $\bullet$ | $\square$ | $\cap$ | $\star$ | $\Delta$ | $\cap$ |
| $\bullet$ | $\star$ | $\oplus$ | $\square$ | $\cap$ | $\oplus$ | $\Delta$ |

## I.


$K=\mathrm{L}=$ ロ
II.

$\mathrm{M}=$ ? $\quad \mathrm{N}=$ ?

I ve II yukandaki tablonun farkiı birer parçasıdır. Buna göre, I'deki $M$ ve N'nin yerine aşağıdakilerden hangisi gelmelidir?

I and II are different pieces of the given table above. According to this, which of the following should be put instead of $M$ and N in Il?

B) $\Delta$
C) $\quad \oplus$
D) ( $+\Delta$
E) $\Delta$ •
47.

| + | X | $\checkmark$ | 0 | + | - | $\square$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| V | $\Delta$ | - | $\checkmark$ | $\triangle$ | X | + |
| $\square$ | - | $\Delta$ | * | V | + | $\checkmark$ |
| $\square$ | $\checkmark$ | $=$ | $\square$ | X | X | - |
| - | $\Delta$ | $\Delta$ | - | $+$ | V | $\checkmark$ |
| $\checkmark$ | X | v | X | $\Delta$ | + | * |
| - | + | + | $\Delta$ | X | D | $\Delta$ |

1. 


II.


## I ve II yukaridaki tablonun farkli birer parçasidir. Buna göre, I'deki M ve N'nin yerine aşağıdakilerden hangisi gelmelidir?

land II are different pleces of the given table above. According to this, which of the following should be put instead of $M$ and $N$ in l/?

B) $\quad \mathrm{x}$
C)
D) $\quad \mathrm{X}$
E) -
48.

| + | $\Delta$ | - | $\Delta$ | a | - | + |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\Delta$ | $\oplus$ | + | - | $\Delta$ | $\oplus$ | $\Delta$ |
| - | - | $\square$ | 1 | ¢ | $\square$ | - |
| L | $\Delta$ | ¢ | - | コ | - | + |
| + | 口 | + | $\oplus$ | - | - | $\oplus$ |
| $\oplus$ | - | $\square$ | + | $\pm$ | ¢ | $\Delta$ |
| + | ¢ | $\Delta$ | - | + | - | $\oplus$ |

I.

| K | L |  |
| :--- | :--- | :--- |
|  | K | L |
|  |  |  |

$K=\square \quad \mathbf{L}=+$
II.

$\mathrm{M}=? \quad \mathrm{~N}=?$
49.

A)
B)
C)

D)
E)

A) $\frac{\mathrm{M}}{\otimes} \frac{\mathrm{N}}{\mathrm{m}}$
B) $\oplus$.
C) • $\quad \underset{y}{x}$
D)
E) $\Delta \quad \oplus$

I ve II yukaridaki tablonun farkil birer parçasidir. Buna göre, ll'deki M ve N'nin yerine așağıdakilerden hangisi geimelidir?

I and II are different pieces of the given table above. According to zhis, which of the following should be put instead of $M$ and N in II?
50.

$$
\left.\left.\left.\begin{array}{l}
{\left[\begin{array}{ll}
0 & 0 \\
0 \\
0
\end{array}\right]+\left[\begin{array}{ll}
0 & 0 \\
0 & 0
\end{array}\right]=\left[\begin{array}{ll}
0 \\
0 & 0
\end{array}\right.} \\
\left.\begin{array}{ll}
0 & 0 \\
0 & 0 \\
0
\end{array}\right]+\begin{array}{l}
0 \\
0 \\
0
\end{array} \\
0
\end{array}\right]=\begin{array}{l}
0 \\
0
\end{array}\right]+\begin{array}{l}
0 \\
0
\end{array}\right]
$$



| 0 | 0 |
| :--- | :--- |
| 0 | 0 |
| 0 | 0 |
| 0 | 0 |

E)

| 0 | 0 |
| :--- | :--- |
| 0 | 0 |

51. 


C)

D)
E)

52.

A)

B)

D)
E)

53.

Aşağıdaki parçalardan hangisi verilen şekli tam bir kare yapar?

Which of the following shapes can make the given shapoe a whole square?

A)
B)

C)

D)
E)

54., 55. ve 56. soruları aşağıdaki şekle göre cevaplayınız.

Answer the questions 54, 55 and 56 according to the figure below.


Yukaridaki şekll a, b, c ve d harfleriyle gösterilen dŏrt pozitif tam sayıyı içeren bazı işlemlere gőre düzenlenmiştir. Harflerin gősterdigl sayilar her soruda farklı olabilir fakat bunlarla yapilacak işlemler her soruda aynidir.

The figure above is arranged according to somne operations which inc/ude four positive whole rnumbers indicated by $a, b, c$ and $d$. The numbers that each letter indicate can be dinerent in each question. but the procedure to be done is the same in all questions.
54.

$K=$ ?
Yukarıdaki verilen şekle göre, K kaçtır?
According to the given figure above, what is the value of $K$ ?
A) 3
B) $\frac{3}{2}$
C) $\frac{1}{2}$
D) $\frac{2}{3}$
E) 2
55.

$K=$ ?
Yukarıdaki verilen şekle göre, K kaçtır?
According to the giver figure above, what is the value of $K$ ?
A) 1
B) 2
C) 4
D) 5
E) 9
56.

$\mathrm{K}=$ ?

Yukarıdaki verilen şekle göre, K kaçtır?
According to the given figure above, what is the value of $K$ ?
A) 1
B) 2
C) 3
D) 4
E) 5
57., 58. ve 59. soruları verilen ilişkiye göre cevaplayiniz.

Answer the questions 57, 58 and 59 according to the relalionship given in ute example.

## Örnek:

Example:
1.
II.


A, B, C, D ve E harfleri I. spekildeki gibl birbirine bağlanmıștır. I. şekildeki bağlanti sayilan ve birbirine bağlanan harfier degisișmemek koşuluyla II. sekil elde edifmiştir.

The lethers $A, B, C, D$ and E are connected to each other as it is given in the figure 1. Figure II is oblained without changing the number of conniections and the letters connected.
57.

II. sekilde $X$ ve $Y$ 'nin yerine gelmesi gereken harflerl bulunuz.

Find the letters that should be put inslead of $X$ and $Y$ in the figure II.
A) $\frac{X}{B} \quad \frac{Y}{C}$
B) E

C
C) $\mathrm{B} \quad \mathrm{A}$
D) $\mathrm{D} \quad \mathrm{E}$
E) D C
58.
I.

II. sekilde $X$ ve $Y^{\prime}$ nin yerine gelmes gereken harfleri bulunuz.

Find she letters that should be put instead of $X$ and $Y$ in the figure II.
A) $\frac{X}{C} \quad \frac{Y}{F}$
B) $\mathrm{B} \quad \mathrm{F}$
C) D E
D) $\mathrm{F} \quad \mathrm{C}$
E) B B
59.

II. șekilde $X$ ve $Y^{\prime}$ nin yerine gelmesi gereken harfleri bulunuz.

Find the letters that should be putinstead of $X$ and $Y$ in the figure Il.
A) $\frac{X}{A} \quad \frac{Y}{C}$
B) A B
C) F B
D) $\mathrm{D} \quad \mathrm{C}$
E) E F
60.


II．


III．


Vukarıdaki terazilerin Uçü de dengede alduğuna gőre，ill．terazide soru ișareti așağıdakiferden hangisini göstermektedir？

Ali three scales above are in balance． Accordingly，which of the following does the question mank stand for in the third scale？
A） 9 ©
B） $\boldsymbol{A} \boldsymbol{A}$
C） $\boldsymbol{4} \boldsymbol{\Delta} \boldsymbol{\theta}$


E）国国
61.


II．


Yukaridaki terazilerin 0çl0 de dengede olduğuna göre，III．terazide soru Ișareti aşağıdakllerden hangisini göstermektedir？

All three scales above are in balance． Accordingly，which of the following does the question mark stand for in the third scale？
A） $\mathbf{A} \mathbf{A D}$
B） $\mathbf{A B}$
c）${ }^{3} 9$
D） $\mathbf{4 B}$

E）国国
62.

II.


Yukaridaki terazilerin uçù de dengede olduğuna göre, III. terazide soru issareti așağıdakilerden hangisini göstermektedir?

All itree scales above are in balance. Accordingly, which of the following does the question mank stand for in the third scale?
A)
B) $\triangle \triangle \mathbf{A}$
C)
63.

Asağıdaki şekillerden hangisi farklıdir?
Which of the following figures is different?
A)

B)

C)

D)

E)

64.

Aşağıdaki şekillerden hangisi farklidir? Which of the following figures is different?
A)

B)

C)

D)

E)

E) $1 \Delta \Delta$
65.

66.

A)
B)
C)

D)

E)

67.
I.

A)
B)

C)
D)


68.

A)
B)
C)

D)

E)

69.
A)
51
5
B)


70.

71.

A) $\mathrm{X}=4, \quad \mathrm{Y}=5460$
B) $\mathrm{X}=16, \mathrm{Y}=10920$
C) $X=32, Y=21840$
D) $X=64, Y=5460$
E) $\mathrm{X}=4, \quad \mathrm{Y}=10920$
72.

| 5 | 2 | 3 | 10 |
| :---: | :---: | :---: | :---: |
| 6 | 4 | 1 | 11 |
| 1 | 9 | $?$ | 12 |
| 12 | $?$ | 6 | $?$ |

A)
B)

C)
D)

E)

73., 74. ve 75. sorulan aşağıdakỉ ömeğe göre cevaplayiniz.

Answer the questions 73, 74 and 75 according to the given sample.

74.

A) 100
B) 102
C) 104
D) 108
E) 110
73.

A) 44
B) 45
C) 46
75.

A) 80
B) 82
C) 86
D) 47
E) 48
D) 90
E) 94
76.

Asağıdaki şekllierden hangisi farklıdır?
Which of the following figures is different?
A)

B)

C)

D)

E)

78.


A)
B)

D)
E)

79.

A) $X=7, Y=9$
B) $\mathrm{X}=2, Y=5$
C) $\mathrm{X}=1, \mathrm{Y}=6$
D) $\mathrm{X}=8, \mathrm{Y}=2$
80.

| 3 | 9 | 1 | 2 | 8 | 3 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 9 | 2 | 7 | 2 | 1 | 9 |
| 1 | 9 | 7 | 3 | 9 | 1 |
| 2 | 1 | 9 | 3 | 8 | 2 |
| 8 | 3 | 9 | 1 | 2 | 8 |
| 3 | 8 | 2 | 1 | 9 | 3 |

A)

| 8 | 3 |
| :--- | :--- |
| 8 | 2 |

B)
C)

| 3 | 8 |
| :--- | :--- |
| 2 | 8 |



| D) | E) |
| :--- | :--- | :--- |
| 2 | 8 |
| 3 | 8 |$\quad$| 8 | 8 |
| :--- | :--- |
| 3 | 2 |

т.c.

İstanbul Üniversitesi

## iÜyös 2014 Cevap Anahtarı

Kitapçık Türü A

| 1 | B |
| :---: | :---: |
| 2 | C |
| 3 | A |
| 4 | C |
| 5 | D |
| 6 | E |
| 7 | D |
| 8 | A |
| 9 | D |
| 10 | C |
| 11 | C |
| 12 | C |
| 13 | C |
| 14 | A |
| 15 | B |
| 16 | B |
| 17 | A |
| 18 | C |
| 19 | E |
| 20 | D |


| 21 | B |
| :---: | :---: |
| 22 | B |
| 23 | C |
| 24 | A |
| 25 | D |
| 26 | C |
| 27 | C |
| 28 | E |
| 29 | C |
| 30 | D |
| 31 | D |
| 32 | B |
| 33 | E |
| 34 | C |
| 35 | C |
| 36 | C |
| 37 | B |
| 38 | E |
| 39 | A |
| 40 | C |


| 41 | C |
| :---: | :---: |
| 42 | C |
| 43 | D |
| 44 | E |
| 45 | B |
| 46 | E |
| 47 | D |
| 48 | B |
| 49 | B |
| 50 | A |
| 51 | E |
| 52 | C |
| 53 | B |
| 54 | B |
| 55 | B |
| 56 | C |
| 57 | A |
| 58 | C |
| 59 | A |
| 60 | C |


| 61 | C |
| :---: | :---: |
| 62 | A |
| 63 | C |
| 64 | D |
| 65 | D |
| 66 | B |
| 67 | D |
| 68 | D |
| 69 | C |
| 70 | B |
| 71 | B |
| 72 | B |
| 73 | B |
| 74 | D |
| 75 | C |
| 76 | A |
| 77 | B |
| 78 | E |
| 79 | A |
| 80 | B |

Edit by=Ahmet Soylak ©

