

KÜTAHYA DÜMLUPINAR ÜNİVERSİTESİ DPÜYÖS 2019

YURTDIŞINDAN ÖĞRENCİ KABUL SINAVI SORU KİTAPÇIĞI
INTERNATIONAL STUDENT ADMISSION TEST BOOKLET

کتاب الامتحان لقبول الطلاب الدوليين

СПРАВОЧНИК ВОПРОСОВ ВСТУПИТЕЛЬНОГО ЭКЗАМЕНА ДЛЯ ИНОСТРАННЫХ
АБИТУРИЕНТОВ

Aday No / Candidate No	:
المرشح رقم / N° Абитуриента	:
Adı / Name	:
الاسم / Имя	:
Soyadı / Lastname	:
نسبة / Фамилия	:
Uyruk / Nationality	:
الجنسية / Гражданство	:
Sınav Merkezi / Examination Center	:
مركز الامتحان / Экзаменационный центр	:
Sınav Salon No / Examination Room No	:
رقم قاعة الامتحان / N° Экзаменационного салона	:

TEMEL ÖĞRENME BECERİLERİ TESTİ

1. Bu test sizin soyut düşünme becerinizi ölçmek için hazırlanmıştır.
2. Bu testte 80 soru vardır, **Sınav süresi 120 dakikadır.**
3. Cevaplamaya istediğiniz sorudan başlayabilirsiniz. Cevaplarınızı işaretlerken soru kitapçığındaki soru numarası ile cevap kâğıdındaki cevap numarasının aynı olmasına dikkat ediniz.
4. Ondalık kesirleri göstermek için Türkçe metinlerde virgül(,) kullanılır.

اختبار مهارات التعلم الأساسية

1. صمم هذا الامتحان لقياس مهاراتك المنطقية المجردة.
2. يتكون الامتحان من ثمانين سؤالاً. مدة الامتحان 120 مئة وعشرون دقيقة.
3. لن يجاب عن الأسئلة وفق ترتيب معين. لكن تأكد من أن الرقم في ورقة الإجابة مطابق تماماً لرقم السؤال الذي تعمل به في كتاب الأسئلة.
4. الكسور العشرية محددة بفاصلة

THE BASIC LEARNING SKILLS TEST

1. This test is designed to measure your abstract reasoning skill.
2. This test is comprised of 80 questions. **The exam duration is 120 minutes.**
3. The questions need not be answered in any special order, but make sure that the number on the answer sheet does indeed correspond to the number of the question you are working on in the test booklet.
4. Decimals are indicated by a comma (,) in Turkish.

ТЕСТ ОСНОВНЫХ УЧЕБНЫХ СПОСОБНОСТЕЙ

1. Данный тест разработан с целью оценки вашего абстрактного мышления.
2. Данный тест содержит 80 вопросов. **Продолжительность экзамена 120 минут.**
3. Можете приступать к ответу с любого вопроса теста. При обозначении ответов на вопросы будьте внимательны, чтобы номер вопроса теста совпадал с номером письменного ответа.
4. Чтобы показать десятичные дроби в турецких текстах используется запятая (,).

URINARIUM
DPÜYÖS 2019

1. $\frac{I}{AYNA \rightarrow SKOS}$
 $\frac{II}{KISA \rightarrow NAIS}$
 $\Rightarrow YAKINSAK = ?$

- A) KSNOAISN B) KSNIOASN C) KSANOISN
 D) KSNAOISN E) KSNAIOSN

2. $KÜTAHYA = 6543913$
 $\Rightarrow KAHVALTI = ?$

- A) 63983742 B) 63953741 C) 63973745
 D) 63913742 E) 63953742

3. $\angle TENEKE = NEKTEE$
 $\odot TAHTA = ATHAT$
 $\odot \angle ELBİSE = ELESİB$
 $\Rightarrow \angle SANDAL \odot = ?$

- A) LADNAS B) LASADN C) NDASAL
 D) DNALAS E) SALAND

4. $\frac{I}{TRKML}$
 $\frac{II}{60714}$
 $\left. \begin{array}{l} RMSTK \\ LKMRT \\ KLTSM \\ MTLKS \end{array} \right\} \Rightarrow \left\{ \begin{array}{l} 71630 \\ 03167 \\ 17046 \\ 36401 \end{array} \right.$

$\Rightarrow RMSTK = ?$

- A) 60714 B) 71630 C) 03167
 D) 17046 E) 36401

5. $\begin{array}{cccccc} 7 & 2 & 4 & 9 & 6 & \equiv & 1315 \\ 6 & 2 & 1 & 3 & 4 & \equiv & 97 \\ 8 & 5 & 3 & 1 & 6 & \equiv & 167 \\ 2 & 8 & 4 & 3 & 9 & \equiv & ? \end{array}$

- A) 1513 B) 9797 C) 1412
 D) 1567 E) 1439

6. I. $7 \odot 5 \square 2 \triangle 4 = 4$
 II. $6 \square 4 \triangle 2 \odot 5 = 3$
 III. $4 \triangle 3 \square 2 \odot 7 = 17$
 IV. $4 \odot 8 \triangle 3 \square 9 = ?$

- A) 15 B) 16 C) 17 D) 18 E) 19

7. $3 \blacksquare 4 = 12$
 $2 \blacksquare 8 = 11$
 $4 \blacksquare 7 = 22$
 $5 \blacksquare 9 = ?$

- A) 33 B) 34 C) 35 D) 36 E) 37

8. $7 \square 4 = 5$
 $1 \square 1 = 2$
 $3 \square 2 = 5$
 $4 \square 3 = ?$

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

9. $18 \ominus 21 = 9$
 $45 \ominus 90 = 0$
 $16 \ominus 12 = 4$
 $67 \ominus 12 = ?$

- A) 12 B) 25 C) 32 D) 36 E) 40

10.

4	7	2	5
3	8	9	8
7	14	4	A
6	8	5	7

Sonuç/Result/Resultat
/النتيجة/результат

A = ?

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

11.

6	4	2	8	40
1	5	7	4	33
4	3	6	2	A
1	7	6	5	37

A = ?

- A) 20 B) 22 C) 24 D) 26 E) 28

12.

x	a	b
a	2a	
c		

+	a	b
a		4c
c		18

$a, b, c > 0 \Rightarrow b = ?$

- A) 15 B) 14 C) 13 D) 12 E) 11

13.

+	a	b	c
a		38	
b			26
c	2b		

$a, b, c > 0 \Rightarrow b = ?$

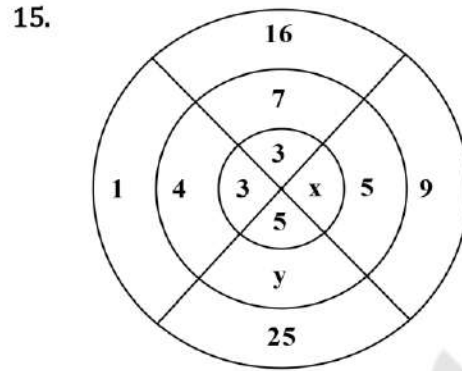
- A) 12 B) 13 C) 14 D) 15 E) 16

14.

+	a	b	c
a		$2c-7$	
b			15
c	$2b+8$		

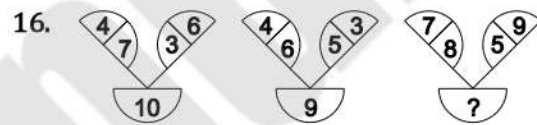
$\Rightarrow a = ?$

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

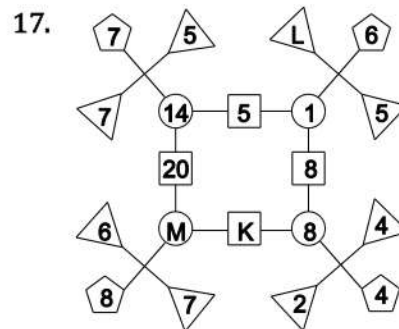


$\Rightarrow x+y = ?$

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



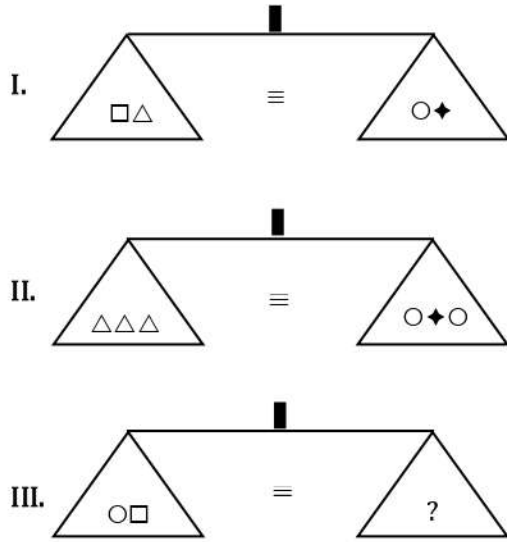
- A) 7 B) 8 C) 11 D) 12 E) 13



$\Rightarrow K+L+M = ?$

- A) 60 B) 64 C) 62 D) 63 E) 61

18.



Yukarıdaki terazilerin üçü de dengede olduğuna göre, III. terazide soru işareti aşağıdakilerden hangisini göstermektedir?

All three scales above are in balance. Which of the following does the question mark stand for in the third scale?

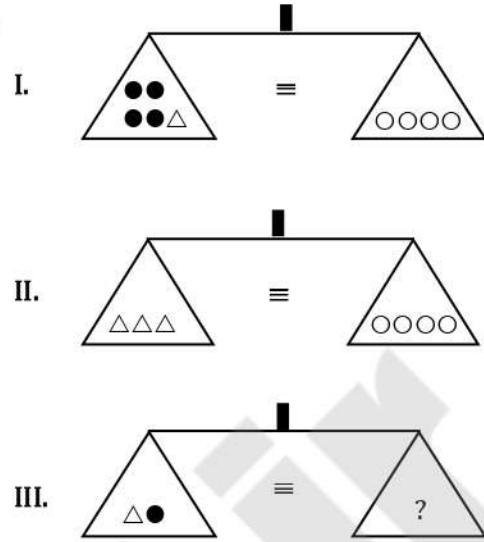
Die oben abgebildeten drei Waagen stehen alle im Gleichgewicht. Folglich, was zeigt das Fragezeichen bei der Waage III an?

Все три весы должны находиться в равновесии. Каким из вариантов ответов, указанных ниже, следует заменить вопросительный знак, так, чтобы весы по прежнему оставались в равновесии?

ما الشكل المناسب لوضعه بدلاً من أداة الاستفهام الموجودة في الميزان الثالث، إذا ما كانت الموازين الثلاثة الواردة أعلاه متساوية؟

- A) \triangle B) $\triangle\triangle$ C) $\triangle\triangle\triangle$
D) $\triangle\triangle\triangle\triangle$ E) $\triangle\triangle\triangle\triangle\triangle$

19.



Yukarıdaki terazilerin üçü de dengede olduğuna göre, III. terazide soru işareti aşağıdakilerden hangisini göstermektedir?

All three scales above are in balance. Which of the following does the question mark stand for in the third scale?

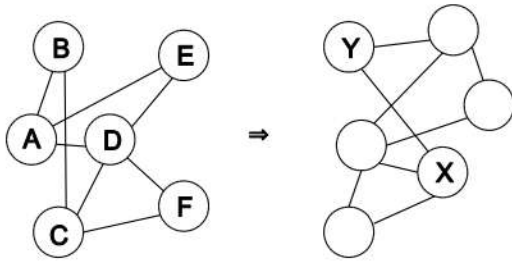
Die oben abgebildeten drei Waagen stehen alle im Gleichgewicht. Folglich, was zeigt das Fragezeichen bei der Waage III an?

Все три весы должны находиться в равновесии. Каким из вариантов ответов, указанных ниже, следует заменить вопросительный знак, так, чтобы весы по прежнему оставались в равновесии?

ما الشكل المناسب لوضعه بدلاً من أداة الاستفهام الموجودة في الميزان الثالث، إذا ما كانت الموازين الثلاثة الواردة أعلاه متساوية؟

- A) \circ B) $\circ\circ$ C) $\circ\circ\circ$
D) $\circ\bullet$ E) $\bullet\bullet$

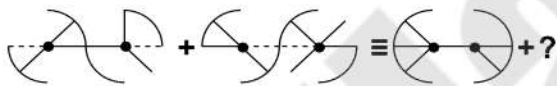
20.



$\Rightarrow X; Y = ?; ?$

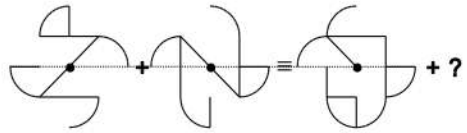
- A) E; B B) A; E C) B; F
 D) C; E E) A; B

21.



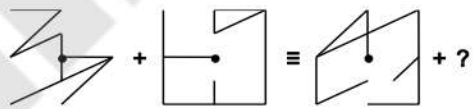
- A) B) C)
 D) E)

22.

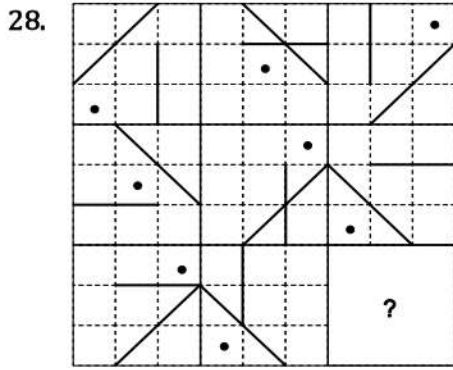


- A) B) C)
 D) E)

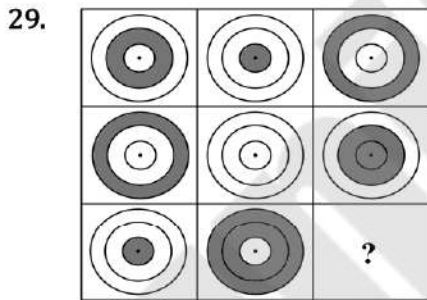
23.



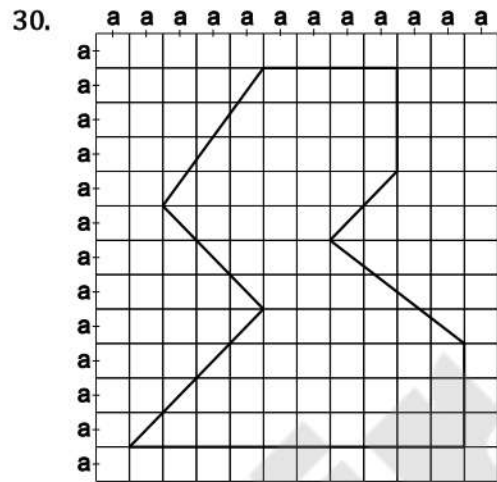
- A) B) C)
 D) E)



- A) B) C)
- D) E)



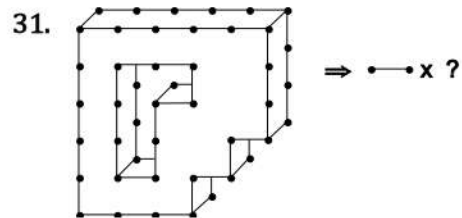
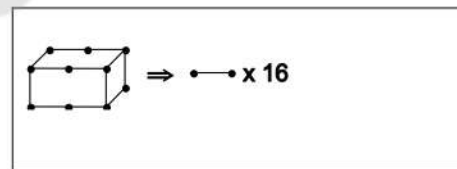
- A) B) C)
- D) E)



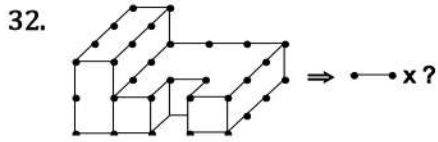
⇒ Çevre/Perimeter/периметр/محيط = ? a

- A) 30 B) $30\sqrt{2}$ C) $27 + 9\sqrt{2}$
 D) 27 E) $30 + 9\sqrt{2}$

Örnek / Example / Beispiel / Пример / مثال

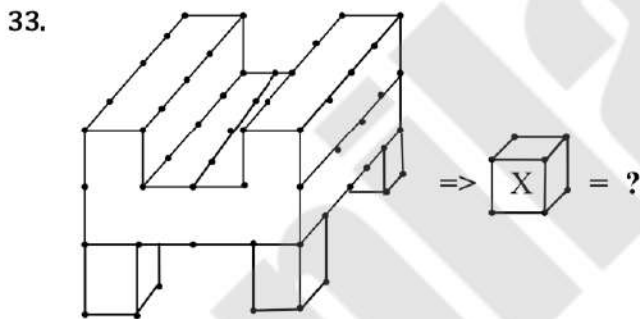
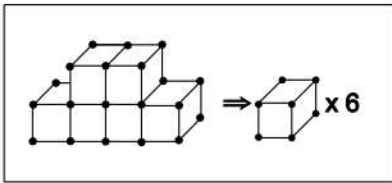


- A) 71 B) 72 C) 73 D) 74 E) 75



- A) 53 B) 54 C) 55 D) 56 E) 57

Örnek / *Example* / Beispiel / *Пример* / مثال

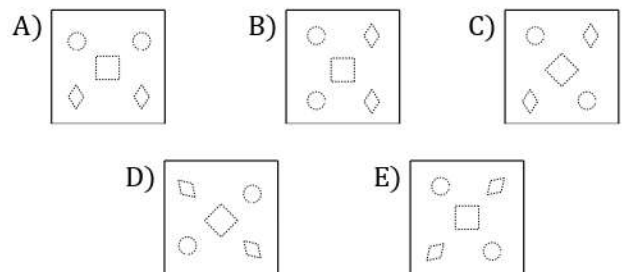
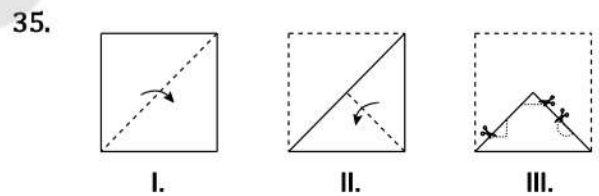
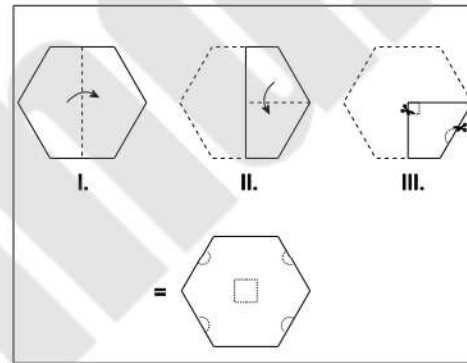


- A) 28 B) 40 C) 32 D) 34 E) 46

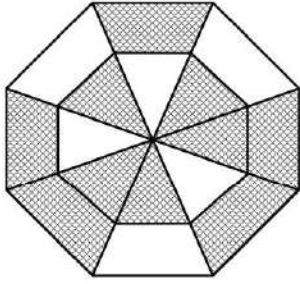
34. 1 3 10 41 ? 1237

- A) 202 B) 206 C) 204 D) 200 E) 208

Örnek / *Example* / Beispiel / *Пример* / مثال



36.



Şeklin yüzde kaç gölgelidir?

What percentage of the figure is shaded?

Wie viel Prozent von Sheklin ist schattig?

Какой процент Шеклина темнеет?

ما نسبة شيكلن غامضة؟

A) $\frac{5}{9}$

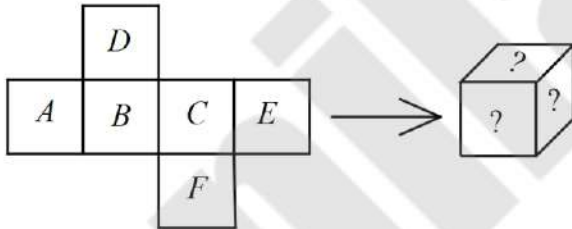
B) $\frac{8}{5}$

C) $\frac{5}{8}$

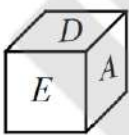
D) $\frac{9}{8}$

E) $\frac{9}{5}$

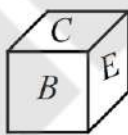
37.



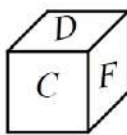
A)



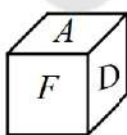
B)



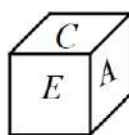
C)



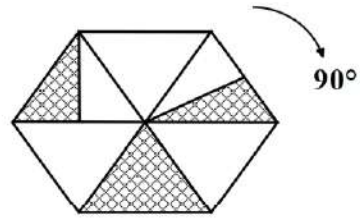
D)



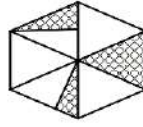
E)



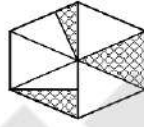
38.



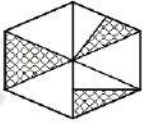
A)



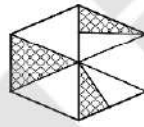
B)



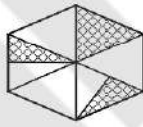
C)



D)



E)



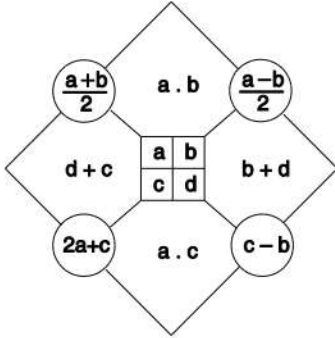
Her soru birbirinden bağımsız cevaplanacaktır. (39-41)

Each question is to be answered independently. (39-41)

Alle Fragen müssen unabhängig voneinander beantwortet werden. (39-41)

Задания решать в не зависимости друг от друга. (39-41)

اجب على الأسئلة بشكل مستقل (39-41)



Yukarıdaki şekil a, b, c ve d harfleriyle gösterilen dört pozitif sayı ve bu sayıları içeren bazı işlemlere göre düzenlenmiştir. Harflerin gösterdiği sayılar her soruda farklı olabilir.

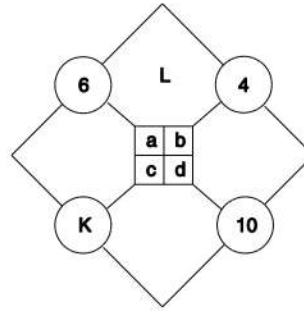
In the figure above, a, b, c ve d stand for four positive integers and various operations concerning these integers are shown. The numerical value of the letters may change from question to question.

a, b, c und d sind vier positive Zahlen. Die Figur besteht aus einigen Rechnungen, die mit diesen Zahlen gemacht wurden. Die Zahlen, die für eine Zahl stehen, können bei jeder Frage anders sein.

На приведенной выше фигуре a, b, c и d четыре натуральных числа и эти буквы расположены в соответствии с различными операциями. Численные значения букв могут меняться в каждом вопросе.

في الشكل أعلاه الأحرف a, b, c, d تمثل اربع ارقام موجبة تم القيام بعمليات حسابية بينها. قيمة الأحرف قد تختلف من سؤال الى آخر

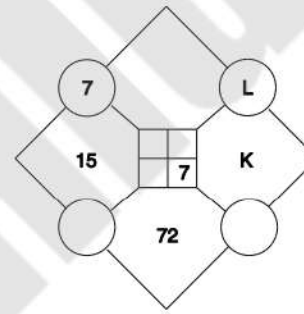
39.



$$\Rightarrow K+L = ?$$

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

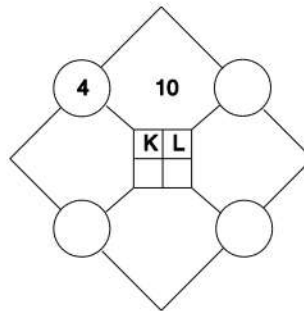
40.



$$\Rightarrow K+L = ?$$

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

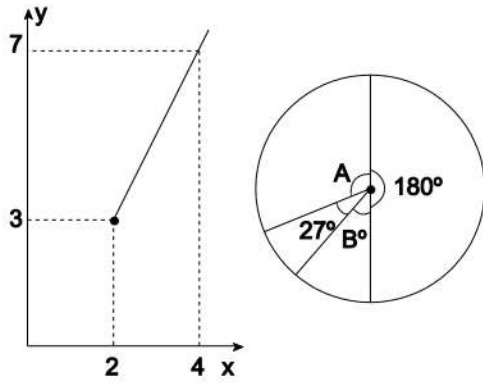
41.



$$\Rightarrow K^2 + L^2 = ?$$

- A) 24 B) 28 C) 44 D) 48 E) 84

42.



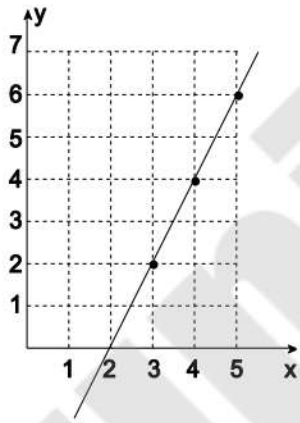
$x = 23,$

$y = B,$

$\Rightarrow A = \% ?$

- A) 30 B) 60 C) 70 D) 75 E) 80

43.



$x = 58$

$\Rightarrow y = ?$

- A) 110 B) 112 C) 114 D) 116 E) 118

44.

$$\begin{array}{r|l} abcabc10 & abc \\ \hline & B \\ \hline & K \end{array} \Rightarrow K+B = ?$$

- A) 100110 B) 10110 C) 100011
D) 1000110 E) 1110

45.

$$\begin{array}{r} K K L \\ + M M K \\ \hline L N L M \end{array}$$

$\Rightarrow K + L + M + N = ?$

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

$$46. \frac{9}{8 + \frac{9}{8 + \frac{9}{\ddots}}} - \frac{8}{16 - \frac{64}{16 - \frac{64}{\ddots}}} = ?$$

- A) -2 B) -1 C) 0 D) 1 E) 3

$$47. \frac{1}{56} + \frac{1}{72} + \frac{1}{90} = ?$$

- A) $\frac{1}{32}$ B) $\frac{3}{56}$ C) $\frac{1}{12}$
 D) $\frac{3}{70}$ E) $\frac{7}{90}$

$$48. \frac{4 + \frac{1}{2} - \frac{1}{2}}{1 - \frac{1}{4}} = ?$$

- A) $\frac{9}{2}$ B) $\frac{11}{2}$ C) 5
 D) 6 E) $\frac{13}{2}$

$$49. x < 0 \Rightarrow$$

$$\sqrt{x^2 - 2x + 1} + \sqrt{x^2} - \sqrt[3]{-x^3} = ?$$

- A) $1 - x$ B) $1 + x$ C) $-1 + x$
 D) $-1 - x$ E) 0

50. $\frac{2}{\sqrt{3}-\sqrt{2}} + \frac{1}{3+\sqrt{8}} - \frac{2}{2-\sqrt{3}} = ?$

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

51. $x, y \in \mathbb{Z}$
 $x\sqrt{5} + y\sqrt{5} = 3x - 2y + 20$
 $\Rightarrow x = ?$

- A) 20 B) 10 C) 0 D) -4 E) -20

52. $a \neq b$

$$\frac{a}{b} = \frac{bx+4}{ax+4}$$

$$\Rightarrow x = ?$$

- A) $4ab$ B) $\frac{a-b}{4}$ C) $-\frac{4}{a+b}$
 D) $\frac{4}{a+b}$ E) $\frac{4}{a-b}$

53. $\frac{a}{2} = \frac{b}{7} = \frac{c}{3}$
 $2a - b + 3c = 24$
 $\Rightarrow b = ?$

- A) 6 B) 28 C) 12 D) 24 E) 8

$$54. \frac{a}{b} = \frac{c}{d} = \frac{e}{f} = \frac{1}{2}$$

$$\left. \begin{array}{l} 2a + 3c - 2e = 7 \\ 2b - 2f = 5 \end{array} \right\} \Rightarrow d = ?$$

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

$$55. -(-a)^2 \cdot (-a)^3 \cdot (a)^{-8} \cdot (-a)^5 = ?$$

- A) $-a^2$ B) $-a$ C) $-a^{-2}$ D) a E) a^2

$$56. \frac{64^x - 16^x}{8^x + 4^x} = 4^x \Rightarrow x = ?$$

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

$$57. f(x) = x^2 - (2 - \sqrt{2})x - \sqrt{8}$$

$$f(x_1) = f(x_2) = 0$$

$$\Rightarrow x_1^3 + x_2^3 = ?$$

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

- D) $8 - 2\sqrt{2}$ E) $16 - \sqrt{2}$

58. $\log_2 3 \cdot \log_3 4 \cdot \log_4 5 \cdot \dots \cdot \log_{63} 64 = ?$

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

59. $\frac{\log 8 + 3}{\log 20} = ?$

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

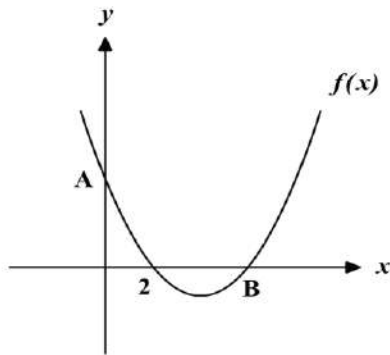
60. $\lim_{x \rightarrow 3} \frac{x^2 + ax - 6}{x^2 - 2x - 3} = m, \quad m \in \mathbb{R} \Rightarrow m = ?$

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

61. $\lim_{x \rightarrow 0} \frac{\sqrt{x+2} - \sqrt{2}}{x} = ?$

- A)
- $\frac{\sqrt{2}}{2}$
- B)
- $\sqrt{2}$
- C)
- $\frac{\sqrt{2}}{4}$
-
- D) 0 E)
- $2\sqrt{2}$

62.



$$f(x) = x^2 - 7x + m$$

$$\Rightarrow |AB| = ?$$

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

$$63. \quad 6f\left(\frac{x}{7}\right) = f\left(\frac{7}{x}\right) + 3x + a$$

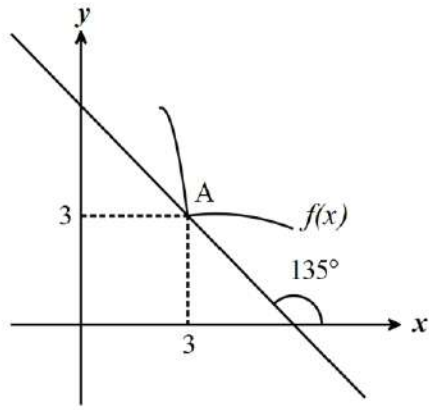
$$f(1) = 5 \Rightarrow a = ?$$

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

$$64. \quad \left. \begin{array}{l} y = f(x) \\ 3xy + 2x - y + 7 = 0 \end{array} \right\} \Rightarrow f'(2) = ?$$

- A) 1 B) $\frac{23}{25}$ C) $-\frac{43}{25}$
 D) $\frac{43}{25}$ E) $-\frac{23}{25}$

65.



$$g(x) = \frac{x^3}{f(x+1)}$$

$$g'(2) = ?$$

- A) $\frac{12}{5}$ B) $\frac{23}{9}$ C) $\frac{17}{16}$
 D) $\frac{44}{9}$ E) $\frac{43}{27}$

66. $\sum_{m=3}^{43} \left(\prod_{n=2}^{27} n \right) = A \cdot 5^x \Rightarrow \max(x) = ?$

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

67. $\int_0^{\pi} \sin^2 x dx = ?$

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

68. $\int \frac{4}{x} d(x^3 - 1) = ?$

- A) $2x^3 + c$ B) $12x^2 + c$ C) $6x^2 + c$
 D) $\frac{x^2}{2} + c$ E) $6x + c$

69. $i^2 = -1$

$z = x + yi$

$(2 + 3i) \cdot z = \bar{z} - 2 \Rightarrow z = ?$

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

70. $\frac{\arctan\left(\tan\frac{\pi}{3}\right)}{2} = ?$

- A) $-\frac{2\pi}{3}$ B) $-\frac{\pi}{3}$ C) $\frac{\pi}{3}$
 D) $\frac{\pi}{6}$ E) π

71. $13x = \pi \Rightarrow \frac{\cos 7x + \cos 3x}{2 \cos 2x \cos 8x} = ?$

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

72. $x \begin{bmatrix} 2 \\ 1 \end{bmatrix} - y \begin{bmatrix} -3 \\ 4 \end{bmatrix} = \begin{bmatrix} 7 \\ -13 \end{bmatrix}$
 $\Rightarrow y - x = ?$

- A) 4 B) 3 C) 0 D) -3 E) -4