



Kitapçık Kodu / Booklet Code: 200705

İÜC-YÖS 2020

# YURTDIŞINDAN VEYA YABANCI UYRUKLU ÖĞRENCİ SINAVI

EXAMINATION FOR FOREIGN OR OVERSEAS STUDENTS

ADI / NAME		KİTAPÇIKTÜRÜ <b>C</b>
SOYADI / SURNAME		
ADAY NO / APPLICANT NUMBER		
SINAV SALON NO EXAM ROOM NUMBER		

## TEMEL ÖĞRENME BECERİLERİ TESTİ

BASIC LEARNING SKILLS TEST

### GENEL AÇIKLAMA

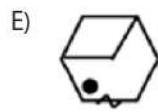
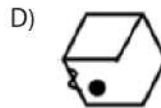
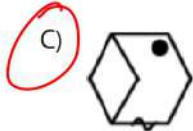
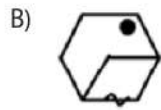
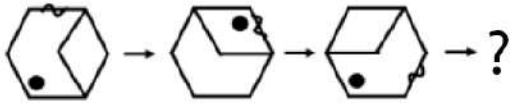
- 1- Bu sınavdaki soruların nasıl cevaplanacağı, testlerin başında açıklanmıştır. Soruları cevaplamaya başlamadan önce bu açıklamaları dikkatle okuyunuz.
- 2- Bu testlerdeki her sorunun bir tek doğru cevabı vardır. Bir soru için birden çok cevap yeri işaretlenmişse, o soru yanlış cevaplanmış sayılacaktır.
- 3- Cevap kağıdında imzanızı ayrılmış alana atınız ve kitapçık türünü mutlaka kodlayınız. Kitapçık türünü kodlamadığınızda veya eksik kodladığınızda sınavınız değerlendirmeye alınmayacaktır.
- 4- Cevaplarınızı koyu siyah ve yumuşak bir kurşun kalemle işaretleyiniz. İşaretlerinizi cevap yerinin dışına taşırmayınız. Tükenmez kalem veya dolma kalem kullanmayınız.
- 5- Cevap kağıdınızı buruşturmayınız, katlamayınız ve üzerine gereksiz hiçbir işaret koymayınız.
- 6- Değiştirmek istediğiniz bir cevabı, yumuşak bir silgiyle, cevap kağıdını örselemeden, temizce siliniz ve yeni cevabınızı işaretlemeyi unutmayınız.
- 7- Bu testler puanlanırken, doğru cevaplarınızın sayısından yanlış cevaplarınızın sayısının dörtte biri düşülecek ve kalan sayı net cevap sayınız olacaktır.
- 8- Sınavda uyulacak diğer kurallar bu kitapçığın arka kapağında belirtilmiştir.

### GENERAL INSTRUCTIONS

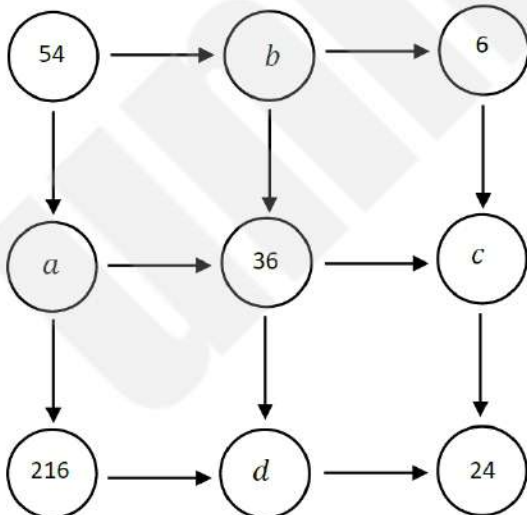
- 1- The exam instructions appear at the beginning of the tests. Please read them carefully before beginning.
- 2- In these tests there is only one correct answer for each question. If more than one alternative is marked for a question, that answer will automatically be considered wrong.
- 3- Sign the answer sheet on the specified field "Signature". It is extremely important that you mark the booklet group. An applicant's examination is declared invalid if she/he does not mark the booklet group.
- 4- You should use a soft, black pencil to mark the answer sheet. Completely fill in the circle for the answer you have chosen, but make sure your mark does not go beyond the borders of the circle. Do not use any kind of pen.
- 5- Keep the answer sheet flat and do not fold it. Do not make any unnecessary marks on it.
- 6- If you wish to change an answer, carefully erase it completely with a very soft eraser. Do not forget to mark your answer.
- 7- In the scoring of the tests, for every four incorrect answers, one correct answer will be deducted; the remaining will be your net answers.
- 8- The other regulations concerning the administration of the tests are mentioned at the back of the booklet.



1.



2.



$a-b+c-d=?$

A) 30

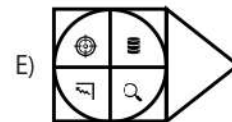
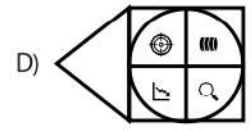
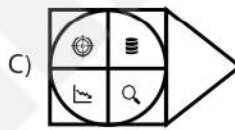
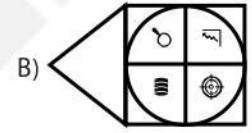
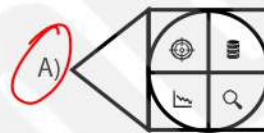
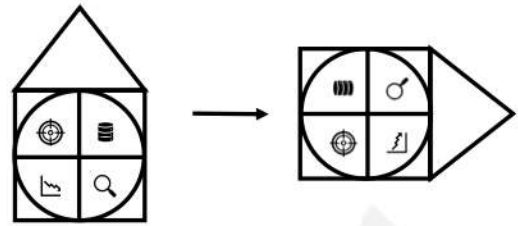
B) 35

C) 40

D) 45

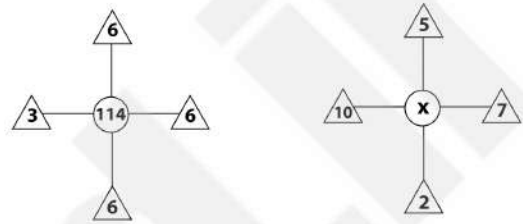
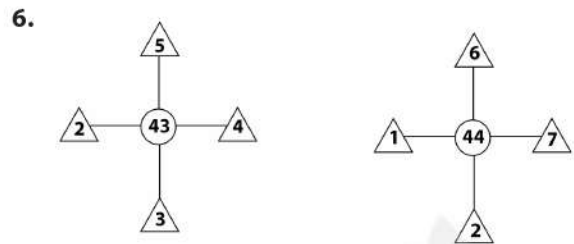
E) 50

3.



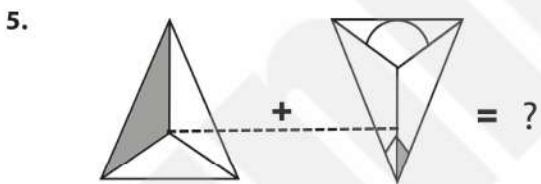


- A)
- B)
- C)
- D)
- E)



$x = ?$

- A) 42      B) 46      C) 52  
D) 112      E) 352



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

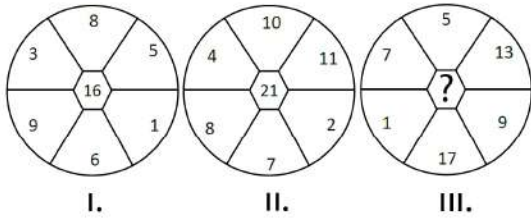
- 7.
- 123 → 4  
234 → 12  
345 → 86  
426 → X

$X = ?$

- A) 92      B) 72      C) 60  
D) 22      E) 16

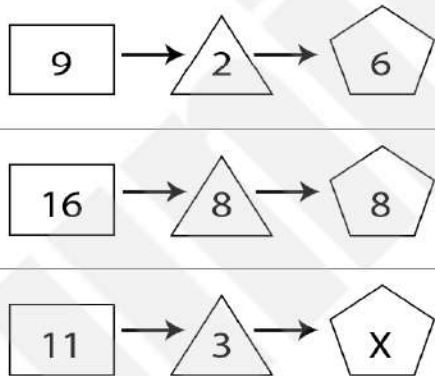
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8.



- A) 24      **B) 26**      C) 28  
D) 30      E) 32

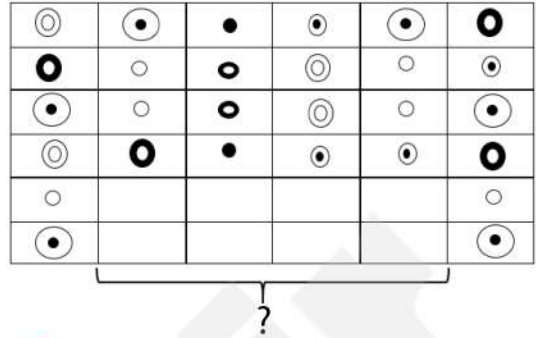
9.



X = ?

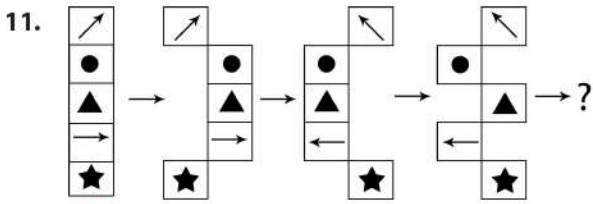
- A) 5      B) 6      **C) 7**  
D) 8      E) 9

10.

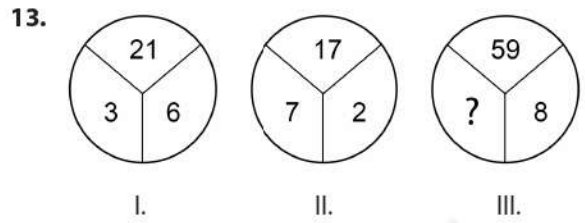


- A)**
- B)
- C)
- D)
- E)

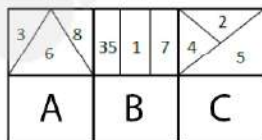
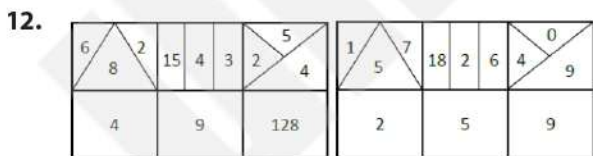




- A)
- B)
- C)
- D)
- E)



- I. II. III.
- A) 6 B) 7 C) 8
- D) 9 E) 10



C - (A+B) = ?

- A) 40 B) 45 C) 56
- D) 63 E) 70

14.

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

16.

- x = ?
- A) 60      B) 70      C) 80
- D) 90      E) 100

15. 

+	▲	▲▲	○△
●		○○○○	▲▲▲
○			
△	○○○○		

▲▲ = ▲ + ▲ ⇒ ● + △ = ?

- A) ▲      B) ○○
- C) ○▲      D) ○○○
- E) ▲▲○○

17. 

U		
	Ö	
		B

 → 

Ö	U	
B		

 → 

		Ö
	B	U

 → ?

A) 

U		
	Ö	
		B

**B)**

U		
	Ö	
		B

C) 

U		
	Ö	
		B

D) 

Ö	U	
		B

E) 

		U
	Ö	
B		

18. 

△	δ	♣	●	◇	∅	♠
♠	◇	△	δ	♠	♣	◇
δ	◇	●	△	∅	δ	δ
♣	∅	∅	●	△	◇	∅
♣	◇	♠	△	♠	◇	△
δ	●	◇	∅	♠	♣	♠
△	●	δ	♣	◇	δ	∅

A
A

 → 

C	B	C
---	---	---

 B = ?

A) ●  
**C)** ♣

B) δ  
D) ◇

E) ♠

19. 

2		
1	40	5
3		

5		
4	28	7
0		

6		
2	1	3
-1		

-4		
3	?	0
2		

A) 1

**B) 0**

C) -4

D) -8

E) -16

20. 

8	12
4	
↓	
35	

7	6
2	
↓	
17	

5	18
3	
↓	
21	

9	8
1	
↓	
17	

10	25
?	
↓	
55	

A) 2

B) 3

C) 4

**D) 5**

E) 6



21.

+	a	b
a		4
b	4	

x	a	b
a		2
b	2	

$a^2 + b^2 = ?$

- A) 20    B) 16    **C) 12**  
D) 8    E) 6

22.

	}	≡	{	<p>75813</p> <p>13857</p> <p>35781</p> <p>81375</p>
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= ?

- A) 17358    B) 38175    C) 51837  
**D) 57138**    E) 73185

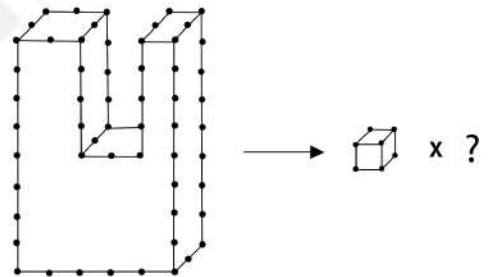
23.

	4	3	1	X
				4
		1	2	
		4		
3	5	Y		

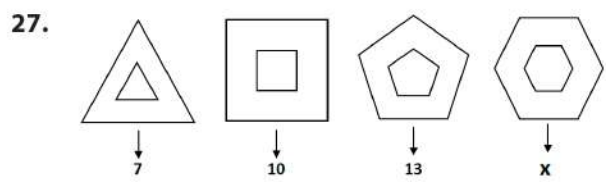
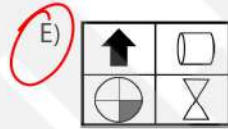
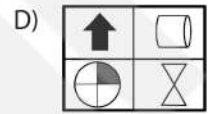
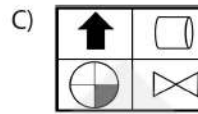
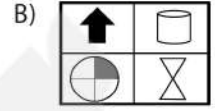
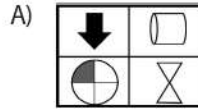
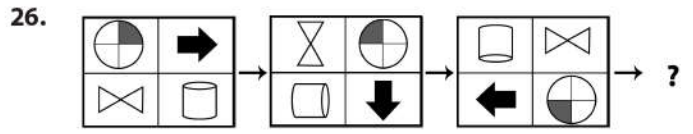
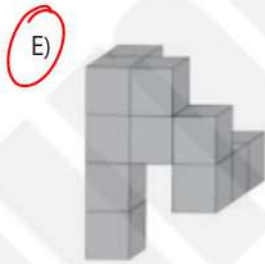
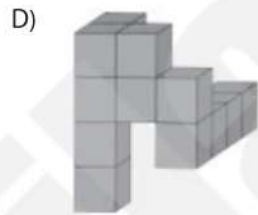
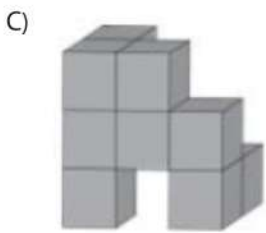
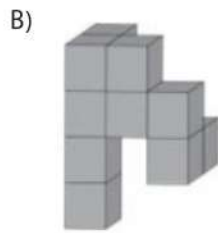
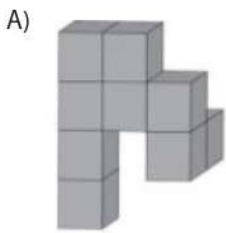
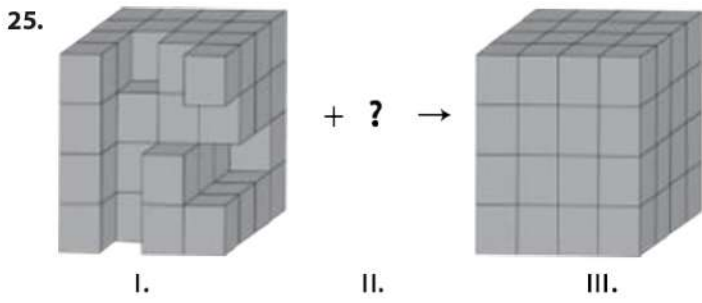
$X \cdot Y = ?$

- A) 1    **B) 4**    C) 6  
D) 8    E) 10

24.



- A) 60    **B) 64**    C) 68  
D) 72    E) 76



$x = ?$

A) 15

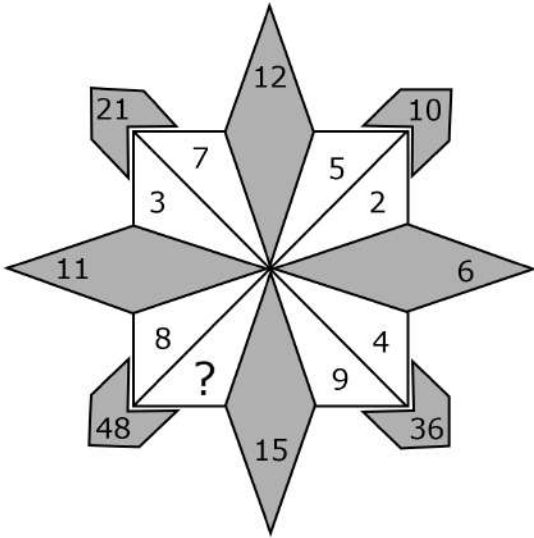
B) 16

C) 17

D) 18

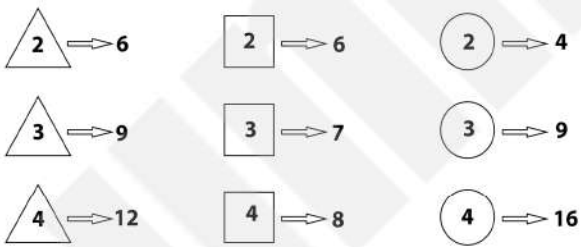
E) 19

28.



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

29.



- A) 27      B) 361      C) 769  
**D) 1090**      E) 3125

30.

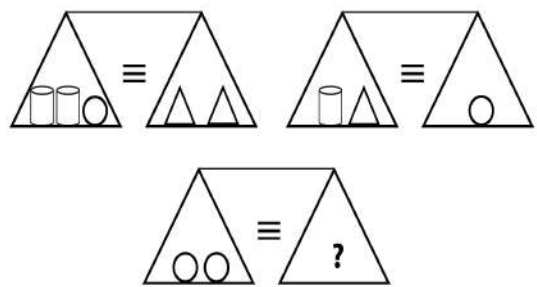
+	a	b	c
a			b+7
b	c-5		
c			

x	a	b	c
a			3a
b			
c			

b = ?

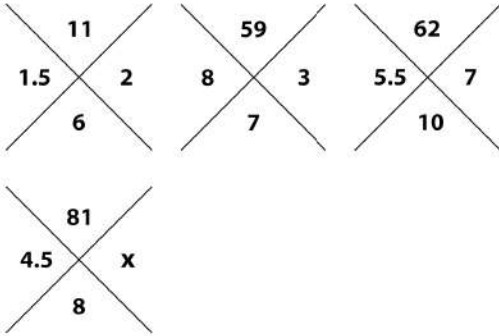
- A) -3**      B) -2      C) 1  
D) 2      E) 3

31.



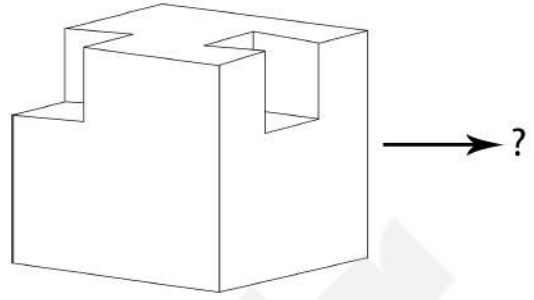
- A)  $\triangle$   $\text{cylinder}$       B)  $\triangle \triangle$   
C)  $\triangle \triangle \text{cylinder}$       D)  $\text{cylinder} \text{cylinder} \triangle$   
**E)  $\triangle \triangle \text{cylinder} \text{cylinder}$**

32.

 $x = ?$ 

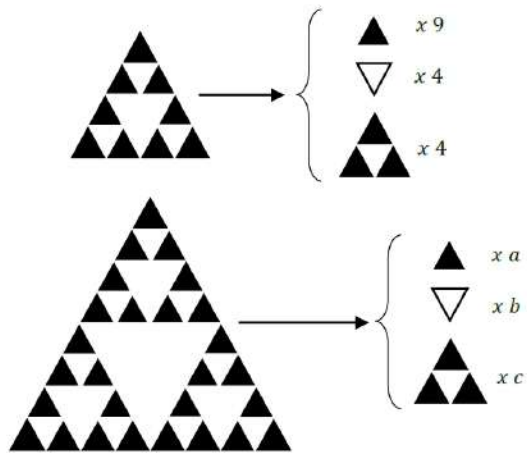
- A) 45      B) 48      C) 49  
D) 50      E) 91

33.



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

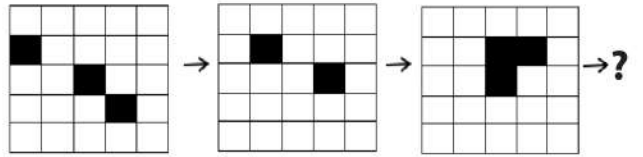
34.



$a+b+c = ?$

- A) 34      B) 35      C) 51  
 D) 53      E) 68

36.



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

35.

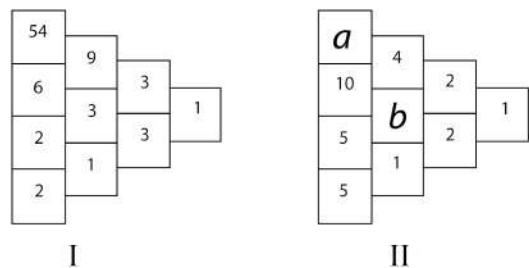
X	a	b	c	d
a		6.d		
b				
c	3.a		9.a	12
d				

$axb = a.b$   
 $a, b, c, d \in \mathbb{R}^+$

$a+b+c+d = ?$

- A) 24      B) 25      C) 27  
 D) 28      E) 32

37.

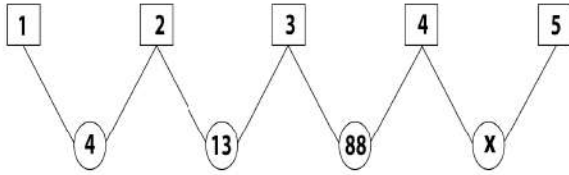


$a+b = ?$

- A) 30      B) 32      C) 36  
 D) 40      E) 42



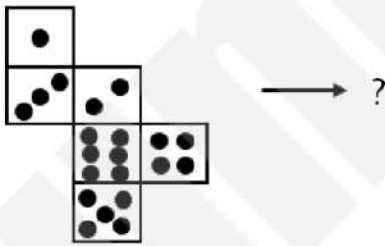
38.



$x = ?$

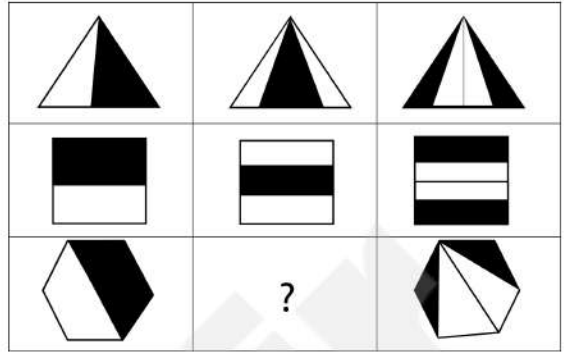
- A) 1033    B) 789    C) 421  
D) 367    E) 102

39.



- A)    B)   
C)    D)   
E)

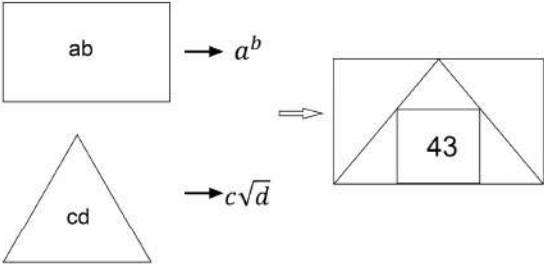
40.



- A)    B)   
C)    D)   
E)

41.  $\frac{256^{0.125} + 9^{0.50}}{25^{0.75}} = ?$

- A)  $5\sqrt{5}$     B)  $\sqrt{5}$     C)  $\frac{\sqrt{5}}{5}$   
D)  $\sqrt[3]{25}$     E)  $\frac{\sqrt[3]{5}}{5}$

42.  = ?

A) 1      B)  $\sqrt{2}$       C) 2  
D) 4      E) 8

44. 
$$\left. \begin{aligned} ax = by = cz = \frac{1}{6} \\ a + b + c = 30 \\ x \cdot y \cdot z = 2 \end{aligned} \right\} xy + yz + xz = ?$$

A) 60      B) 120      C) 180  
D) 360      E) 480

43.  $x, y \in \mathbb{Z}^+$

$$\frac{1}{x-5} + \frac{1}{12-2y} = 1$$

$x + y = ?$

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

45.  $f(x) = \log_5(x-2) \Rightarrow f^{-1}(2) = ?$

A) 18      B) 21      C) 24  
D) 27      E) 30



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46.  $x - y - z = 5$   
 $2y + 3x + z = 16$   
 $y - 2x + 2z = 9$   
 $x = ?$   
A) 30      B) 15      C) 10  
D) 5      E) 0

48.  $P(x) = -3x^3 + 4x^2 - ax + 6$   
 $P(2) = -4$   
 $P(-1) = ?$   
A) 2      B) 4      C) 10  
D) 14      E) 17

47. 
$$\begin{array}{r} x^4 - x^3 + 3x^2 + 5 \\ \hline x^2 - 1 \\ \hline \end{array}$$
  
A(x)  
 $ax + b$   
 $a - b = ?$   
A) -10      B) -9      C) -1  
D) 9      E) 10

49.  $\frac{P(x+3)}{Q(2x-1)} = -x^3 + 4x + 9$   
 $Q(3) = 2$   
 $P(5) = ?$   
A) -18      B) -9      C) 9  
D) 18      E) 27



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50.  $(1 - i)^{10} = ?$

- A)  $-32i$       B)  $1 - 16i$       C)  $16i$   
D)  $10 + 8i$       E)  $10i$

52.  $\frac{\sqrt[3]{125^{2x+3y}}}{\sqrt[4]{25^{4x+8y}}} = 625$  ise  $y = ?$

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

51. 
$$\left. \begin{aligned} z_1 &= 2x + 4 + yi \\ z_2 &= 5x - 2 + (x + 1)i \\ z_1 &= z_2 \end{aligned} \right\} \Rightarrow y = ?$$

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

53.  $2^a \triangle 3^b = a.b + 2 \Rightarrow 16 \triangle 9 = ?$

- A) 146      B) 38      C) 34  
D) 14      E) 10

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54.  $a \triangle b = \begin{cases} a^b, & a \leq b \\ b^a, & a > b \end{cases}$

$(-2 \triangle 4) \triangle (-1) = ?$

- A) -16      B) -1      C)  $\frac{1}{16}$   
 D) 1      E) 16

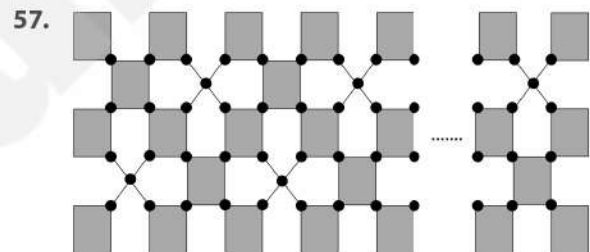
55.  $A = \{a, b, c, d\}$   
 $B = \{c, d, e, f\}$   
 $C = \{b, c, f\}$   
 $X = \{a, b, d\}$   
 $X = ?$

- A)  $A \cup B$       B)  $B \cap C$       C)  $A - B$   
 D)  $A - (B \cap C)$       E)  $(A \cup C) - B$

56.  $A = \{x \mid 2 \leq x < 98, x = 2k, k \in \mathbb{N}\}$   
 $B = \{y \mid 15 \leq y \leq 120, y = 5m, m \in \mathbb{N}\}$

$s(B-A) = ?$

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



$\bullet \times 108 \rightarrow \square \times ?$

- A) 48      B) 51      C) 54  
 D) 57      E) 60





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58.  $\log_2 \frac{3x-2}{x+1} = 1 \Rightarrow x = ?$

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

59.  $\left( \frac{2}{1-3\frac{1}{4}} - \frac{2+1\frac{1}{2}}{5} \right)^{-1} : \left( -1\frac{4}{5} \right) = ?$

- A)  $\frac{450}{143}$       B) 1      C)  $\frac{50}{143}$   
D)  $-\frac{50}{143}$       E) -1

60.  $\Delta, \textcircled{C}, \textcircled{R} \in \mathbb{Z}^+$

$\Delta \cdot \textcircled{R} = 30$

$\textcircled{R} \cdot \textcircled{C} = 45$

$\min(\Delta + \textcircled{C}) = ?$

- A) 2      B) 5      C) 15  
D) 60      E) 75

61.  $x, y \in \mathbb{Z}^+$

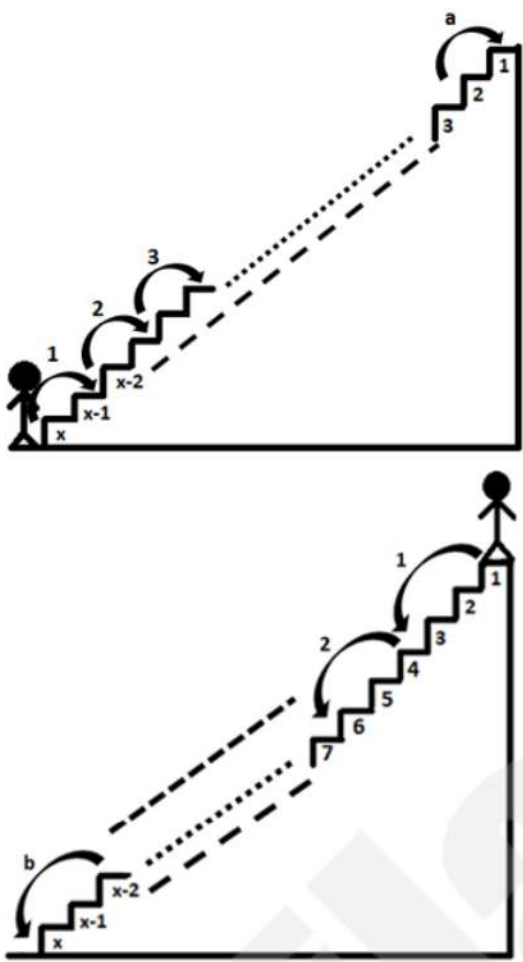
$x^2 + 6x - 6y - y^2 = 20$

$x + y = 4$

$x^2 - y^2 = ?$

- A) 8      B) 10      C) 12  
D) 14      E) 16

62.



$$a = b + 20$$

$$x = ?$$

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

63M

$$\left. \begin{array}{l} 10^x = 4 \\ 5^y = 3 \end{array} \right\} 10^{6y-3xy} = ?$$

- A) 729   
  B) 243   
  C) 64  
 D) 27   
  E) 10

64.

$$\left. \begin{array}{l} a + \frac{3}{b} = 7 \\ 2b + \frac{5}{a} = 8 \end{array} \right\} \frac{7b + 4a - \frac{1}{2}}{2a} = ?$$

- A) 8   
  B) 4   
  C) 3  
 D) 2   
  E) 1