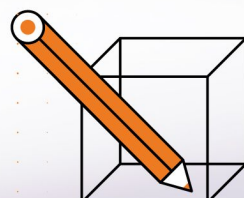
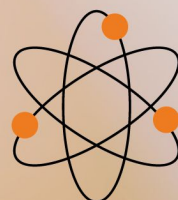


آزمون های آزمایشی

یوس



1. $(x-5)^{14} = (5-x)^x$
 $\sum x = ?$

- A) 20
 B) 18
 C) 24
 D) 25
 E) 29

$x, y \in \mathbb{Z}$
 2. $\sqrt{3}x + \sqrt{3}y = 2x + 5y + 12$
 $x = ?$

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

3. $x^2 = x - 1$ $x^{1017} + x^{2015} = ?$

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

4. $x = \frac{1}{7} + \frac{1}{8} - \frac{1}{9} \Rightarrow \frac{\frac{6}{7} + \frac{7}{8} - \frac{8}{9}}{\frac{13}{7} + \frac{7}{8} + \frac{19}{9}} = ?$

- A) $\frac{1-x}{x+5}$
 B) $\frac{x+1}{x+5}$
 C) $\frac{x-1}{x+5}$
 D) $\frac{x-1}{x-5}$
 E) $\frac{x-1}{5-x}$

5.

$a, b, c, d \in \mathbb{Z}^+$

$a + \frac{1}{b + \frac{1}{c + \frac{1}{d}}} = \frac{53}{7} \Rightarrow a + b + c + d = ?$

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

6. $(10100111)_3 = (A)_9 \Rightarrow A = ?$

- A) 3431
- B) 3413
- C) 3341
- D) 3314
- E) 3143

7. $\frac{53}{16} = (A)_4 \Rightarrow A = ?$

- A) 311
- B) 31,1
- C) 3,11
- D) 0,311
- E) 0,0311

8.

$$x, A \in \mathbb{N}$$

$$31! - 30! = A \cdot 10^x \Rightarrow (x)_{\max} = ?$$

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

9.

$$(xyz), (xy) \in \mathbb{N}$$

$$xyz + xy = 305 \Rightarrow x + y + z = ?$$

- A) 19
- B) 17
- C) 16
- D) 14
- E) 12

10.

$$\left. \begin{array}{l} \frac{m}{n} = \frac{p}{q} = \frac{r}{s} = k \\ \frac{2m+3p-r}{2n+3q+as} = k \end{array} \right\} \Rightarrow a = ?$$

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

11.

$$\sqrt{a\sqrt{a\sqrt{a}\dots}} + \sqrt{a + \sqrt{a + \sqrt{a + \dots}}} = 16$$

$$a = ?$$

- A) 6
B) 12
C) 15
D) 20
E) 30

$$12. \quad 2x^2 - 14x + 3 = 0 \Rightarrow x^2 + \frac{9}{4x^2} = ?$$

- A) 45
B) 46
C) 49
D) 51
E) 54

13.

$$|a| > a, a.c < 0, a.b < a.c$$

$$|a-b| - |b-c| - |c-a| = ?$$

- A) 2a
B) a - c
C) 0
D) 2b
E) 2c

14. Let a, b and $c \in \mathbb{Z}^+$

$$\frac{2\sqrt{21}}{\sqrt{3} + \sqrt{7} - \sqrt{10}} = \sqrt{a} + \sqrt{b} + \sqrt{c}$$

$$\Rightarrow a^2 + b^2 + c^2 = ?$$

- A) 158
B) 227
C) 65
D) 49
E) 120

$$15. \quad 2.\bar{9} - \frac{1.\bar{9}}{3.\bar{9} + \frac{1}{2.\bar{9}}} = ?$$

- A) $\frac{33}{13}$
B) $\frac{27}{12}$
C) $\frac{11}{9}$
D) $\frac{5}{4}$
E) $\frac{1}{2}$

16. $\begin{cases} a+b+c=4 \\ ab+ac=2 \end{cases} \rightarrow a^2 + \frac{4}{a^2} = ?$

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

17. $\begin{cases} x^2y + xy^2 = 12 \\ xy = 4 \end{cases} \rightarrow x^3 + y^3 = ?$

- A) -18
- B) -9
- C) -3
- D) 9
- E) 18

18. $a, b, c \in \mathbb{N}$

$(4a+b)$ ve $(3b+c)$ çift, $(a^3 + c)$ tek sayılar, Buna göre aşağıdakilerden hangileri doğrudur

$(4a+b)$ and $(3b+c)$ are even and $(a^3 + c)$ is odd numbers, accordingly which one of the following is correct?

- A) a tek sayı / a is an odd number
- B) a çift sayı / a is an even number
- C) b tek sayı / b is an odd number
- D) c tek sayı / c is an odd number
- E) $a^2 + b^2$ çift sayı / $a^2 + b^2$ is an even number

19. $a, b \in \mathbb{Z}$

$a = \frac{3b+10}{b}$ olduğuna göre a kaç farklı değer alır?

$a = \frac{3b+10}{b}$ accordingly how many different value of a exist?

- A) 4
- B) 6
- C) 8
- D) 10
- E) 12

20. $\begin{aligned} 2.5 + 3.7 + 4.9 + \dots + 10.21 &= A \\ 2.8 + 3.10 + 4.12 + \dots + 10.24 &= ? \end{aligned}$

- A) $A+160$
- B) $A+162$
- C) $A+163$
- D) $A+165$
- E) $A+168$

21.

$ab \in \mathbb{N}$

$ab = 4(a+b)$

$\rightarrow \min(ab) = ?$

- A) 12
- B) 14
- C) 21
- D) 24
- E) 26

22.

$$a > 4$$

$$(A)_a = \left(2a + \frac{1}{a}\right)^2 \Rightarrow A = ?$$

- A) 12,01
- B) 12,02
- C) 40,1
- D) 404,01
- E) 44,1

23.

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

$$x^2 \cdot 200 = y^3 \rightarrow \min(x) = ?$$

- A) 2
- B) 5
- C) 25
- D) 50
- E) 125

24.

$$A, x \in \mathbb{N}$$

$$\begin{array}{r} A \quad | \quad x^3 \\ - \quad \quad x \\ \hline 48 \end{array}$$

$$\rightarrow \min(A) = ?$$

- A) 240
- B) 248
- C) 260
- D) 300
- E) 304

25.

$$\left(1 - \frac{1}{4}\right)\left(1 - \frac{1}{5}\right)\left(1 - \frac{1}{6}\right) \cdots \left(1 - \frac{1}{15}\right)x = \frac{1}{30} \rightarrow x = ?$$

- A) $\frac{1}{6}$
- B) $\frac{1}{2}$
- C) 1
- D) 2
- E) 15

26.

$$x^3 - 1 = 0$$

$$x \neq 1$$

$$\rightarrow x^3 - 3x^2 + 2x - 4 = ?$$

- A) 0
- B) $5x - 8$
- C) $5x + 8$
- D) $-5x$
- E) $5x$

27. $7^{x+1} = 5 \Rightarrow 35^{\frac{x+1}{2}} = ?$

- A) 5
- B) 10
- C) 1
- D) 14
- E) 7

28. $\frac{\sqrt{2-2x} + x^2 + 1}{3x + \sqrt{x-1}} = ?$

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

29.

$x, y \in \mathbb{Z}$

$\frac{1}{x-2} + \frac{1}{x+y-8} = 1$

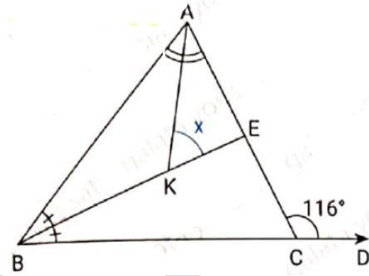
$\rightarrow x.y = ?$

- A) 24
- B) 18
- C) 12
- D) 6
- E) 4

30. $\sqrt{(\sqrt{5}-\sqrt{3})\sqrt{8+2\sqrt{15}}} = ?$

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

31.



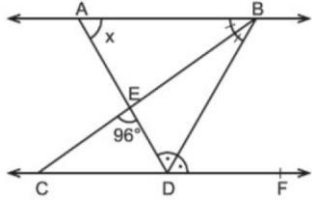
ABC bir üçgen (triangle). $[AK]$ ve $[BK]$ açıortay (bisector), $m(\angle ACD) = 116^\circ$

Yukarıdaki verilere göre, x kaç derecedir?

(Based on the above data, how many degrees is x ?)

- A) 42
- B) 48
- C) 50
- D) 55
- E) 58

32.



$AB \parallel CF$

$$m(\angle ABC) = m(\angle CBD)$$

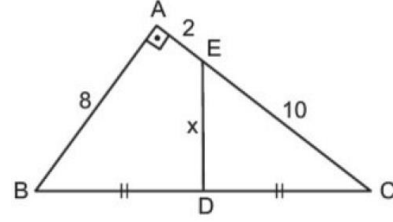
$$m(\angle ADB) = m(\angle BDF)$$

$$m(\angle CED) = 96^\circ$$

Yukarıda verilene göre, $m(\angle BAD) = x$ kaç derecedir?

- A) 50
- B) 52
- C) 56
- D) 58
- E) 60

34.



ABC dik üçgen

$$|BD| = |DC|$$

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

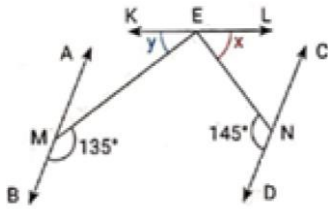
$$|AE| = 2 \text{ cm}$$

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

Yukarıda verilene göre, $|ED| = x$ kaç cm dir?

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

33.



$AB \parallel CD$, $m(\angle BME) = 135^\circ$, $m(\angle DNE) = 145^\circ$

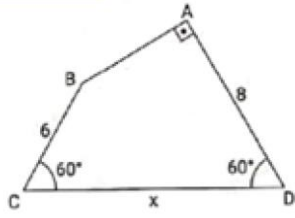
$$m(\angle KEM) = y, m(\angle LEN) = x$$

Yukarıda verilene göre $x + y$ nedir?

(Based on the above data, what is $x+y$?)

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

35.



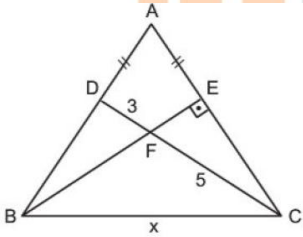
$$m(C) = m(D) = 60^\circ, |AD| = 8, |BC| = 6, |CD| = x$$

Yukarıdaki verilere göre, x kaçtır?

(Based on the above data, what is x?)

- A) 8
- B) 10
- C) 12
- D) 14
- E) 15

36.



ABC üçgeninde

$$BE \perp AC$$

$$|AB| = |AC|$$

$$|AD| = |AE|$$

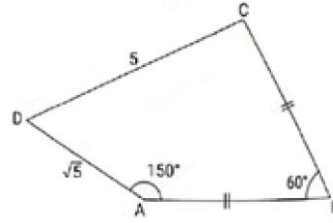
$$|CF| = 5 \text{ cm}$$

$$|DF| = 3 \text{ cm}$$

Yukarıda verilenlere göre, $|BC| = x$ kaç cm dir?

- A) $6\sqrt{2}$
- B) $4\sqrt{5}$
- C) $3\sqrt{10}$
- D) $4\sqrt{6}$
- E) 10

37.



ABCD dörtgen (quadrilateral),

$$m(CBA) = 60^\circ, m(DAB) = 150^\circ$$

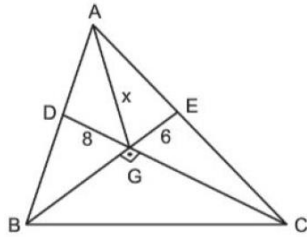
$$|BC| = |AB| = x, |AD| = \sqrt{5} \text{ cm}, |DC| = 5 \text{ cm}$$

Yukarıdaki verilere göre, x kaç cm'dir?

(Based on the above data, how many cm is X?)

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

38.



ABC üçgeninde

G, ağırlık merkezi

$BE \perp CD$

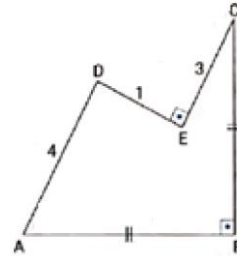
$|GE| = 6 \text{ cm}$

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

Yukarıda verilenlere göre, $|AG| = x$ kaç cm dir?

- A) 10
- B) 12
- C) 15
- D) 20
- E) 24

39.



$[AB] \perp [BC]$

$[DE] \perp [EC]$

$[AD] \parallel [EC]$

$|AB| = |BC|$

$|AD| = 4$

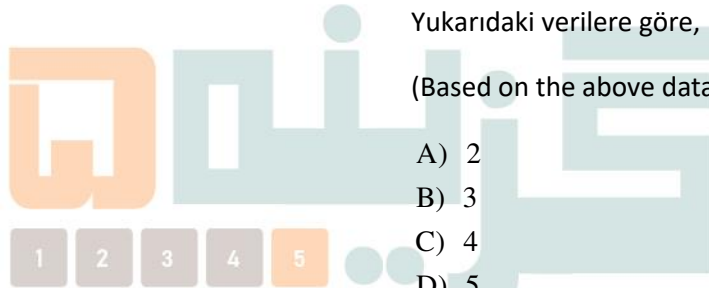
$|EC| = 3$

$|DE| = 1$

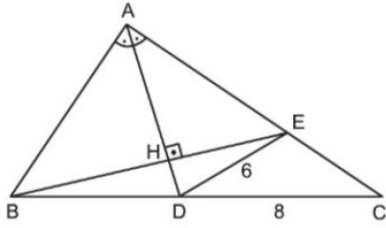
Yukarıdaki verilere göre, $|AB|$ kaçtır?

(Based on the above data, what is $|AB|$?)

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



40.



ABC üçgeninde

AD açkırtay

$$AD \perp BE$$

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

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

Yukarıda verilenlere göre, $\frac{|AE|}{|EC|}$ oranı kaçtır?

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

42. $2 - 3 - 10 - 39 - ?$

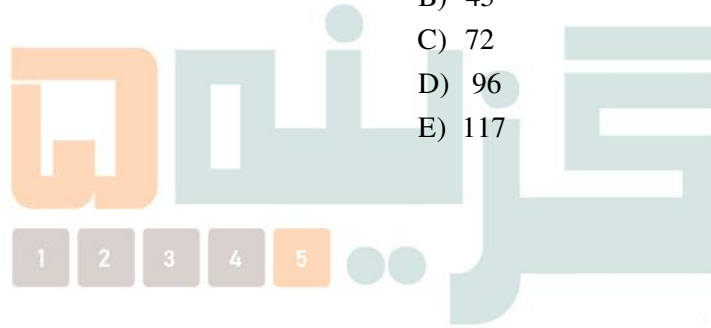
- A) 196
- B) 155
- C) 157
- D) 195
- E) 117

$$a^2 \Delta = (3a - 1)^2 - 4$$

43. $a \square = a^2 - a - 4$

$$(5 \square) \Delta = ?$$

- A) 32
- B) 45
- C) 72
- D) 96
- E) 117



41. 10, ?, 10, 13, 26, 16, 19

- A) 21
- B) 20
- C) 5
- D) 19
- E) 16

44. 4 11 20 32 49 ?

- A) 73
- B) 74
- C) 77
- D) 87
- E) 98

45.

$41 \bigcirc 24 = 6$

$63 \bigcirc 12 = 4$

$62 \bigcirc 39 = 6$

$82 \bigcirc 15 = ?$

A) 7

B) 8

C) 9

D) 10

E) 11

46.

$a \square b = 3a - 4b + 7$

$a \bigcirc b = (a + b)^2$

$a \triangle b = a - 3b - 8$

$(3 \bigcirc 4)(5 \square 2) = ?$

A) 0

B) 1

C) -2

D) -1

E) 2

48. 1 , 8 , 72 , 46 , ?

A) 512

B) 414

C) 521

D) 92

E) 454

49. 301 , 441 , 682 , 898 , ?

A) 9999

B) 3333

C) 2424

D) 7878

E) 6565

47.

$11 \star 21 = 13$

$12 \star 22 = 25$

$23 \star 42 = 61$

$31 \star 25 = ?$

A) 49

B) 65

C) 61

D) 52

E) 64

50. 1 , 0 , 1 , 2 , 4 , 16 , 19 , ?

A) 76

B) 38

C) 57

D) 72

E) 114

51. $3 - 1 - 2 - 4 - 2 - 3 - 9 - ?$

- A) 6
B) 7
C) 8
D) 9
E) 10

52.

4	8	13	21	x
3	6	y	17	28

 $x, y \rightarrow ?, ?$

- A) $32 - 9$
B) $32 - 10$
C) $33 - 9$
D) $32 - 11$
E) $33 - 10$

53. Find the number that is not following the rule $2 - 5 - 7 - 12 - 19 - 30 - 43$

- A) 43
B) 30
C) 19
D) 7
E) 5

54.

12	19	?	36	46
12	19	?	30	34

- A) $25 - 25$
B) $26 - 27$
C) $27 - 26$
D) $27 - 25$
E) $27 - 27$

55. $(2,0), (3,1), (5,3), (7,6), (11,10), ?$

- A) (13,15)
B) (16,20)
C) (17,15)
D) (15,15)
E) (13,20)

56. $\frac{1}{2}, \frac{2}{4}, \frac{4}{5}, \frac{5}{7}, \frac{6}{9}, ?$

- A) $\frac{7}{9}$
B) $\frac{9}{10}$
C) $\frac{7}{11}$
D) $\frac{9}{11}$
E) $\frac{7}{13}$

57.

t s i b = 20

h a d z n a p = 15

j n a p = 5

h a d z i s = 13

k e y = 1

h a d z a v a d = ?

A) 9

B) 10

C) 11

D) 12

E) 13

58.

XYMPA = 2

DFPMB = 4

XOMTE = 1

RNQ = 2

TWFQB = ?

A) 1

B) 2

C) 3

D) 4

E) 5

59.

●	□	△	▲	} →	1	2	3	4
○	△	▲	□		6	3	2	4
■	▲	△	□		4	1	6	5
□	■	○	●		5	6	2	3
●	○	▲	△		5	4	3	2

●○▲△ = ?

A) 1234

B) 6324

C) 4165

D) 5623

E) 5432

60.

akar
kara
aras
saka
kasa

} → kasa = ?

A) 5154

B) 1535

C) 1545

D) 3515

E) 5453

61.

$$p q r m = 61$$

$$b t m q o p = 63$$

$$z m z t p = 52$$

$$a m b c q q m = ?$$

- A) 88
B) 90
C) 94
D) 98
E) 102

62.

$$(a \star b) = a^3 - 3a^2b + 3ab^2 - b^3$$

$$(1800 \star 1801) = ?$$

- A) 1800
B) 1080
C) 0
D) -1
E) 1

63.

$$\star GOZINEPANJ \rightarrow NNGZPJOIEA$$

$$\blacktriangle shima \rightarrow amihs$$

$$\star \blacktriangle xmaixt = ?$$

- A) it max x
B) mxaixt
C) aitmxx
D) iatmxx
E) miatxx

64.

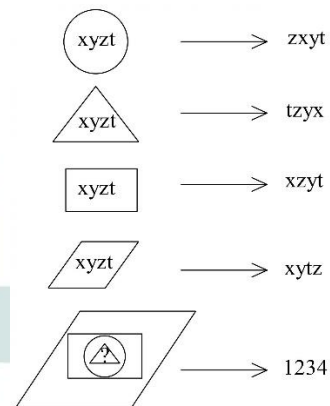
$$a \star b = a + (a \boxtimes b) + 4b$$

$$8 \star 4 = 32$$

$$8 \boxtimes 4 = ?$$

- A) 12
B) 16
C) 8
D) 15
E) 20

65.



- A) 3412
B) 4132
C) 1324
D) 3124
E) 2314

66.

METHODIK → 3C 7R 1A 4D 6H 2B 5F

? → 2R 5A 3D 1F 4B

- A) DKEOM
- B) METHOD
- C) KODEM
- D) DKOEM
- E) DOKEM

67.

$$(x^y, ab) = x^2 + \frac{5y}{6} + a^2 + b$$

(64, 39) = ?

- A) 25
- B) 26
- C) 27
- D) 28
- E) 29

68.

$$\left. \begin{array}{l} \text{KASABA} \\ \text{MASRAF} \\ \text{SAHARA} \\ \text{TAYTAY} \\ \text{ARAFAT} \end{array} \right\} \rightarrow \left\{ \begin{array}{l} 111011 \\ 010101 \\ 110110 \\ 010111 \\ 010110 \end{array} \right. \quad \text{SAHARA} = ?$$

- A) 111011
- B) 010101
- C) 110110
- D) 010111
- E) 010110

69.

$$\left\{ \begin{array}{l} 38676 \\ 93532 \\ 71819 \\ 82854 \\ 63734 \end{array} \right. \quad 63734 = ?$$

- A) 51413
- B) 40478
- C) 94656
- D) 39790
- E) 69598

70.

$$5 \star 4 = 22$$

$$7 \star 8 = 38$$

$$3 \star 6 = 24$$

$$7 \star 1 = ?$$

- A) 11
- B) 15
- C) 17
- D) 19
- E) 21

71. aşağıdaki dizilerden hangisi yanlıştır?

Which of the following series is false?

- A) 1,2,5,10,13
- B) 5,10,6,12,5
- C) 20,10,14,7,11
- D) 3,15,20,100,105
- E) 17,51,40,120,109

74.

7	○□○
9	○□
2	□○
5	□
?	□○○□○□○□

- A) 2795
- B) 5972
- C) 7925
- D) 2759
- E) 2579

72. 7 , 8 , 10 , 15 , ?

- A) 22
- B) 31
- C) 25
- D) 41
- E) 30

75. GOZINEPANJ = ?

- A) 3254067891
- B) 1054256781
- C) 8577418632
- D) 2348652791
- E) 8235017406

73. 25 – 30 – 33 – 36 – 42 – ?

- A) 44
- B) 46
- C) 48
- D) 45
- E) 47

76.

bcafg	{	{	wxqpm
degcb = ??			phwqp
gfbac			twmxh
egddf			xmhwt
cafbg			hwtmx

- A) wxqpm
- B) phwqp
- C) twmxh
- D) xmhwt
- E) hwtmx

77.

$7 \rightarrow 51$

$6 \rightarrow 44$

?

- A) $5 \rightarrow 32$
 B) $4 \rightarrow 18$
 C) $5 \rightarrow 27$
 D) $2 \rightarrow 16$
 E) $4 \rightarrow 26$

79.

$$\left. \begin{array}{l} \text{qayi} \\ \text{oyan} \\ \text{oraq} \\ \text{eyrt} \\ \text{uran} \end{array} \right\} \rightarrow \left\{ \begin{array}{l} 2479 \\ 5738 \\ 5430 \\ 8346 \\ 1730 \end{array} \right. \quad \text{eyrt} + \text{oraq} = ?$$

- A) qurq
 B) qertb
 C) qerb
 D) qeur
 E) qela



78.

$2 \star 12 = 65$

$6 \star 6 = 217$

$3 \star 8 = 82$

$2 \star 10 = ?$

- A) 28
 B) 33
 C) 69
 D) 129
 E) 253

80.

$$\left\{ \begin{array}{l} 5893 \\ 4937 \\ 7387 \\ 6581 \end{array} \right\} \quad \left\{ \begin{array}{l} 7082 \\ 7001 \\ 6195 \\ 2197 \end{array} \right\} \quad 4204 = ?$$

- A) 6364
 B) 9953
 C) 2663
 D) 8468
 E) 3848

تعدادی از نتایج درخشان موسسه آموزشی یونی لند



این بچه ها، سال های گذشته جای شما بودن.

بین رقبات کجا وایستادی؟

برای اینکه بدونی نسبت به رقبات تو چه جایگاهی قرار داری، کافیه پاسخ برگ خودتو به آیدی زیر در تلگرام ارسال کنی.



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اگر نتونستی به تلگرام وصل بشی، با شماره ی زیر تماس بگیر تا راهنمایی کنیم.



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۰۲۱-۸۸۸۳۶۶۱۷



گزینده

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