

## Mathematics

1) 
$$\frac{1}{2} + \frac{2}{3} \div \frac{1}{9} - \frac{3}{4} = ?$$

- A) 1      B)
- $\frac{11}{4}$
- C)
- $\frac{25}{2}$
- D)
- $\frac{23}{4}$

2) 
$$\frac{\sqrt{125}}{3} + \frac{\sqrt{45}}{2} - \frac{\sqrt{5}}{6} = ?$$

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

3) 
$$3 - \left( \frac{3}{4} + \frac{5}{6} + \frac{11}{12} \right) = ?$$

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

4) 
$$\frac{1,68 - 0,968}{0,356} = ?$$

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

5) 
$$3^4 + (-1)^{24} + 45^0 - 36^1 = ?$$

- A) 46      B) 47      C) 45      D) 89

6) 
$$x \cdot \sqrt{0,04} = 1 \rightarrow x = ?$$

- A) 5      B) 2      C)
- $\frac{1}{5}$
- D)
- $\frac{1}{2}$

$$7) \left. \begin{array}{l} x + 16 = 30 \\ y - 4 = 7 \\ -6 + z = -2 \end{array} \right\} \rightarrow x + y + z = ?$$

- A) 42      B) 30      C) 29      D) 12

$$8) \sqrt{5 + \frac{4}{9}} \cdot \sqrt{1 - \frac{13}{49}} = ?$$

- A)  $\frac{3}{7}$       B)  $\frac{2}{3}$       C) 2      D) 3

$$9) (x - y - z)^2 - (x + y - z)^2 = ?$$

- A)  $4x(x - z)$       B)  $y(x - z)$   
C)  $4y(z - x)$       D)  $4z(x - y)$

$$10) \frac{ac + ad + bc + bd}{c^2 + cd} = ?$$

- A)  $\frac{c + d}{c}$       B)  $\frac{a + b}{d}$       C)  $\frac{a + b}{c + d}$       D)  $\frac{a + b}{c}$

$$11) \frac{x^3y - xy^3}{x^2y + xy^2} \text{ simplest form}$$

- A)  $x$       B)  $y$       C)  $x - y$       D)  $x + y$

$$12) \frac{a}{a + 1} + \frac{a - 1}{a^2 - 1} = ?$$

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

13)

$$1 - \frac{1 - \frac{2}{3}}{1 + \frac{2}{3}} = ?$$

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

14)

$$\frac{2x}{3} + \frac{3x}{2} = \frac{13}{4} \rightarrow x = ?$$

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

15)

$$\left(\frac{1}{32}\right)^x = 4^5 \rightarrow x = ?$$

- A) -2      B) 3      C) -4      D) 2

16)

$$3^x + 4 \cdot 3^x + 7 \cdot 3^x = 324 \rightarrow x = ?$$

- A) 0      B) 1      C) 2      D) 3

17)

$$\frac{1 + \frac{x}{x+2}}{1 - \frac{x}{x+2}} = 5 \rightarrow x = ?$$

- A) 5      B) 4      C) 3      D) 2

18)

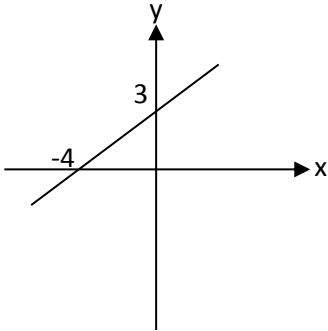
$$\left(1 + \frac{1}{3}\right) \cdot \left(1 + \frac{1}{4}\right) \cdot \dots \cdot \left(1 + \frac{1}{92}\right) = ?$$

- A) 25      B) 28      C) 31      D) 33

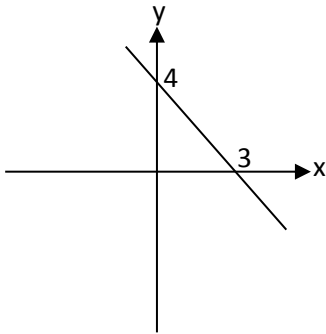
19)  $3x+4y=12$  denkleminin grafigi asagidakilerden hangisidir?

Cili nga opsionet e poshteshenuara është Grafiku ekuacionit  $3x+4y=12$ ?

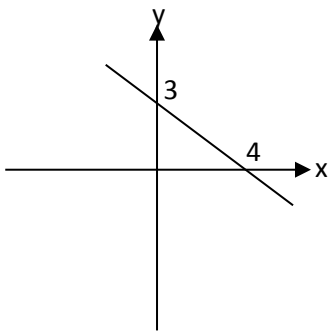
A)



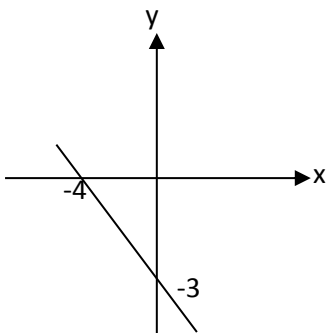
B)



C)



D)



20)

$$a + b = 3$$

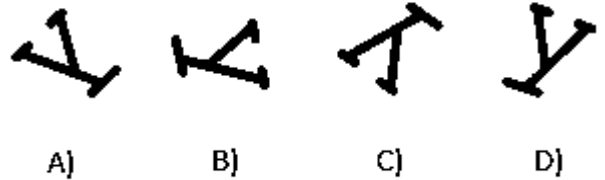
$$a \cdot b = 2$$

$$\rightarrow \frac{a-3}{a+2} + \frac{b-3}{b+2} = ?$$

A)  $-\frac{11}{12}$       B)  $-\frac{3}{12}$       C)  $-\frac{1}{12}$       D) 5

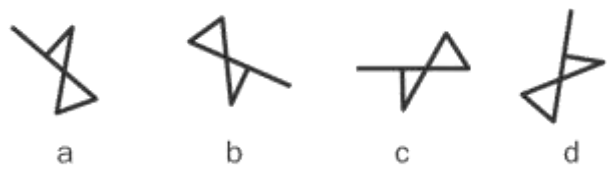
21. Cila nga të mëposhtmet është ndryshe nga të tjerat?

Aşağıdakilerden hangisi diğerlerinden farklıdır?



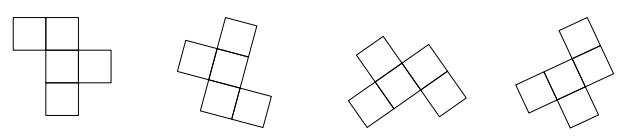
22. Cila nga të mëposhtmet është ndryshe nga të tjerat?

Aşağıdakilerden hangisi diğerlerinden farklıdır?



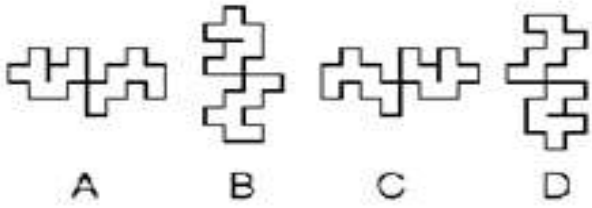
23. Cila nga të mëposhtmet është ndryshe nga të tjerat?

Aşağıdakilerden hangisi diğerlerinden farklıdır?



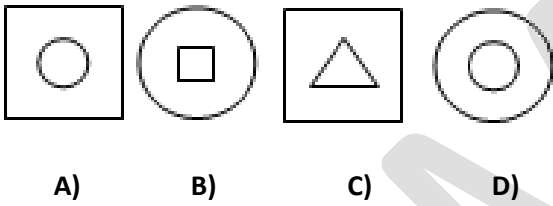
24. Cila nga të mëposhtmet është ndryshe nga të tjerat?

Aşağıdakilerden hangisi diğerlerinden farklıdır?

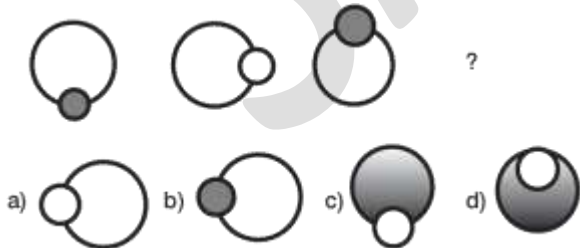


25. Cila nga të mëposhtmet është ndryshe nga të tjerat?

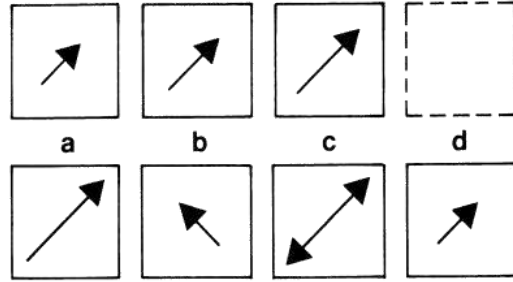
Aşağıdakilerden hangisi diğerlerinden farklıdır?



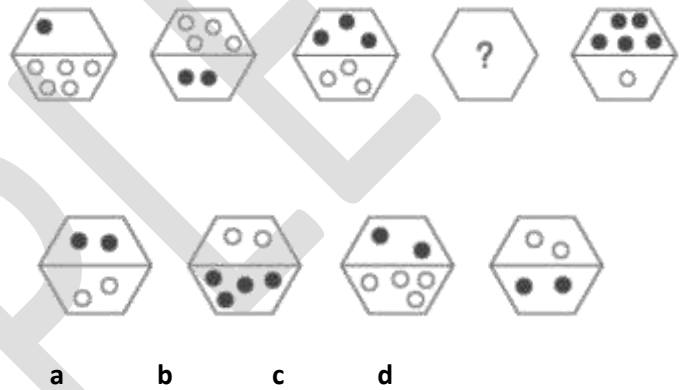
26.



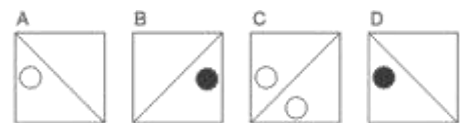
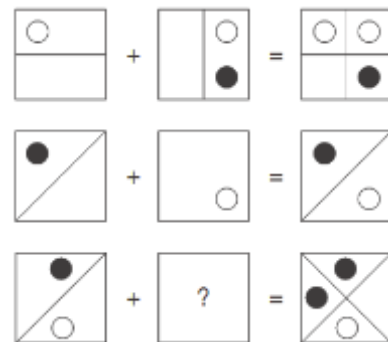
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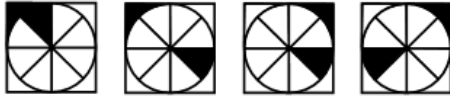
28.



29.



30.



I

II

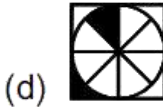
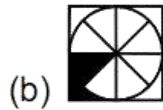
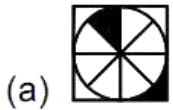
III

IV



V

VI



31. 100, 99, 96, 91, 84, 75, 64, ?

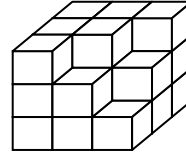
a) 49      b) 48      c) 51      d) 50

32.

11	22	6
12	23	8
14	33	?

A) 9    B) 11    C) 13    D) 15

33.



Şekilde kaç küp vardır?

Sa kub janë në figurë?

A) 22      B) 23      C) 24      D) 25

34.

22	1	16
7	?	19
10	25	4

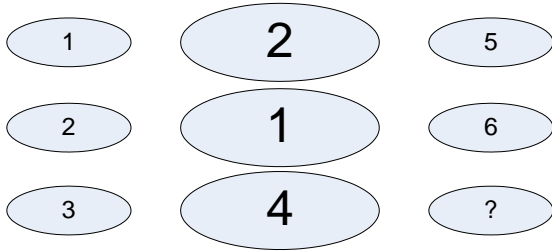
A)13    B) 24    C) 12    D) 58

35.  $KL + KL + KL = ML8$

$L + M = ?$

a) 13    b) 12    c) 10    d) 7

36.



- a) 2    b) 3    c) 4    d) 5

37.  $\Delta + \Delta = \square$   
 $\square - \Delta = 5$   
 $\square = ?$

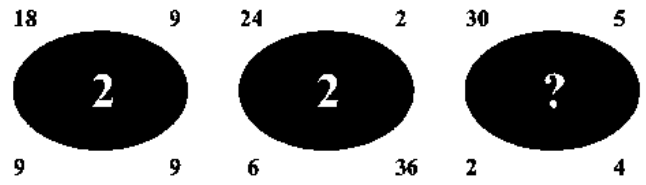
- a) 6    b) 10    c) 8    d) 9

38.



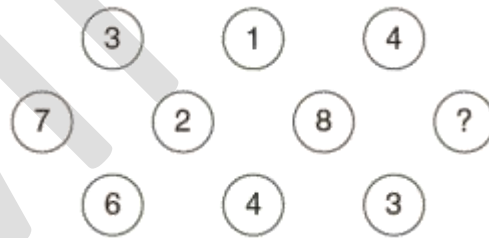
- a) 72    b) 80    c) 81    d) 96

39.



- a) 6    b) 10    c) 8    d) 9

40.



- a) 3    b) 7    c) 4    d) 6