

Multiple Choice

1) Which two numbers should replace the question mark?

    → 1431

    → 1136

    → ?

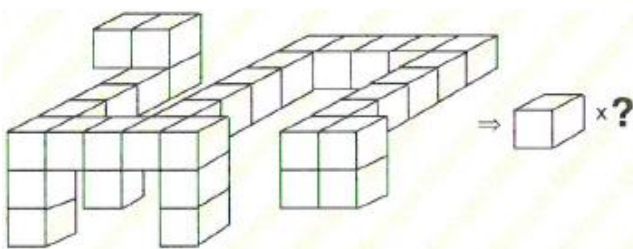
- A) 3114 B) 4111
C) 1115 D) 4115

2) Change 07 to letters.

70 }
50 }
09 }
30 }
07 }

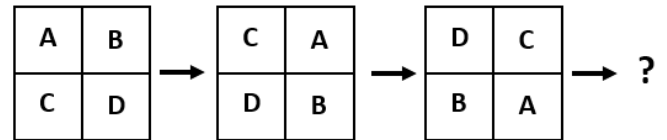
- A) FA B) AF
C) MA D) SA

3) How many small cubes are there?



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

4) Find next one



- A)

C	B
D	A

 B)

A	C
D	B

C)

B	C
A	D

 D)

B	D
A	C

5) What number should replace the question mark?

21, 42, 43, 86, ?, 174

- A) 87 B) 88
C) 90 D) 92

6) What number should replace the question mark?

3	6	15	45
5	10	27	81
4	8	21	63
6	12	?	99

- A) 9 B) 22
C) 11 D) 33

7) What number should replace the question mark?

1 2 3 5 8 13 ?

- A) 33 B) 21
C) 22 D) 18

8) According to this formula, solve problem III.

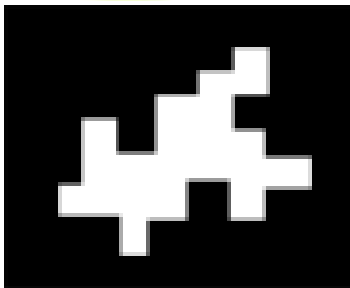
I. $a \star b = a + 4 \cdot b + 1$

II. $a \bullet b = 3 \cdot a - b + 4$

III. $(6 \bullet 12) + (9 \star 3) = ?$

- A) 28 B) 36
C) 30 D) 32

9) Which of the following completes the above shape?



- A) B)
C) D)

10) According to this formula, solve problem III.

I. $x \Delta y = x \cdot y - 1$

II. $x \square y = x + y + 1$

III. $(2 \Delta 3) \square 4 = ?$

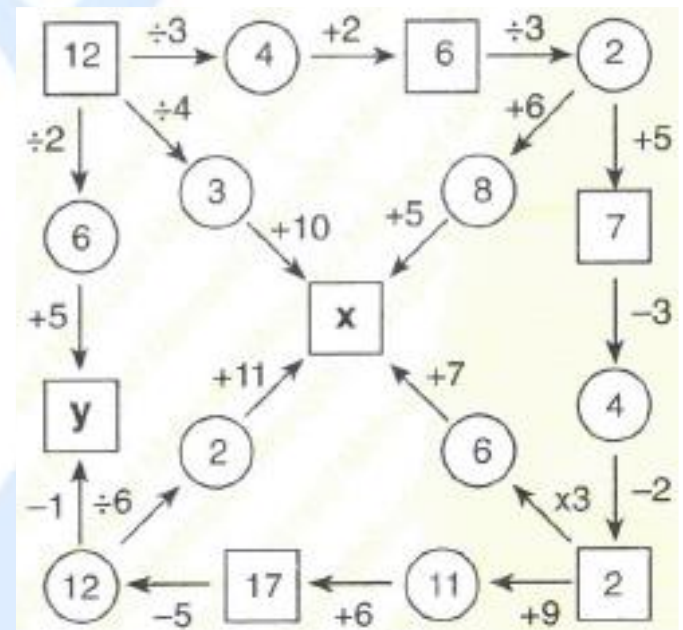
- A) 10 B) 11
C) 12 D) 13

11) Find the next number.

	8	24	42	56
2	4	6	7	?

- A) 12 B) 8
C) 14 D) 3

12) What is the value of $x + y = ?$



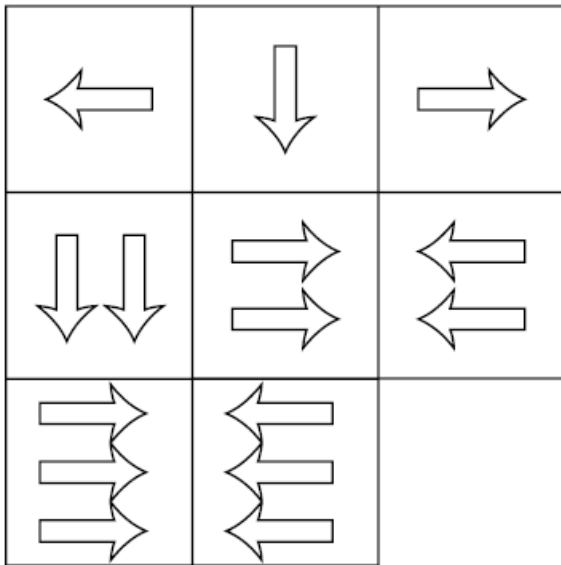
- A) 25 B) 22
C) 24 D) 11

13) What number should replace the question mark?

0, 1, 2, 4, 6, 9, 12, 16, ?

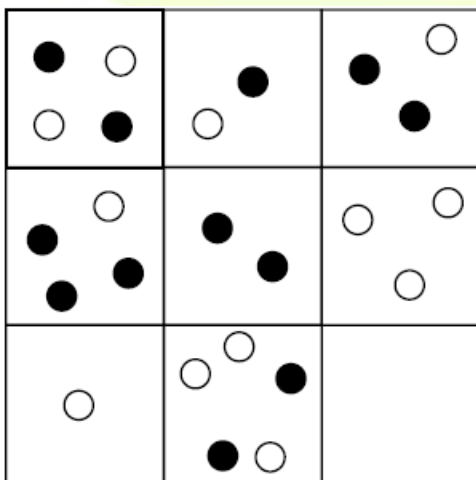
- A) 19 B) 20
C) 21 D) 22

14) Which is the missing tile?



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

15) Which is the missing tile?



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

16) What comes next?



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

17)

$$\text{If } \square \times \square = \Delta$$

$$\Delta - \square = \square + \square + \square$$

then $\Delta = ?$

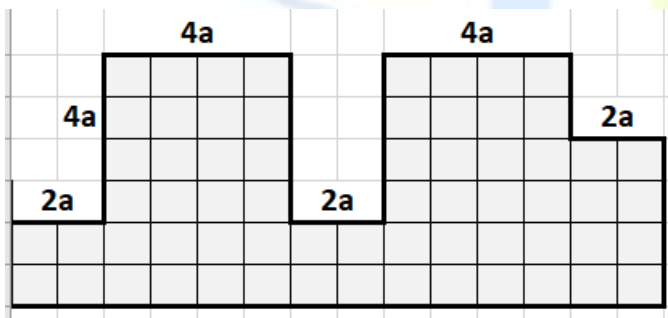
- A) 4 B) 28
C) 16 D) 30

18) With the given rule find $x + z - y = ?$

▲	3	7	9
5			x
8	11	z	
14	y		

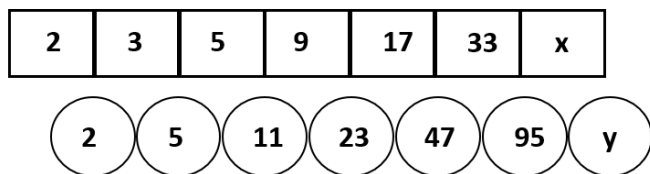
- A) 7 B) 10
C) 8 D) 12

19) What is the area of shaded region in a^2 ?



- A) 58 B) 60
C) 62 D) 64

20) Find $y - x = ?$



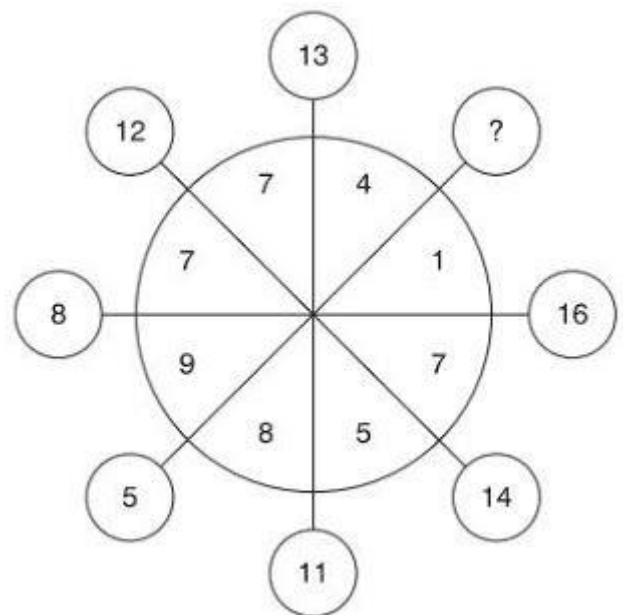
- A) 120 B) 123
C) 125 D) 126

21) According to this formula, solve problem IV.

- I. $a \blacksquare b = a + 2b - 2$
II. $a \blacktriangle b = 3a + b + 4$
III. $a \bullet b = 2a + 3b$
IV. $(3 \blacksquare 2) \bullet (4 \blacktriangle 3) = ?$

Answer: _____

22) Find missing number.



Answer: _____

23) According to this formula, solve problem II.

- I. $\left(\begin{array}{c} \triangle 3 \\ \square 4 \\ \odot 2 \end{array} \right) = (3 + 3 + 3) + (4 + 4 + 4) + (2 + 1 + 1) = 25$
II. $\left(\begin{array}{c} \square 5 \\ \triangle 4 \\ \odot 2 \end{array} \right) = ?$

Answer: _____

24) Find the value of:

$$(a \square L) + (b \square M) - (K \square C) = ?$$

$\square$	a	b	c
K	9	10	22
L	31	18	7
M	41	12	5

Answer: _____

25)

If

$$4 + 4 = 20$$

$$5 + 5 = 30$$

$$6 + 6 = 42$$

$$7 + 7 = 56$$

$$\text{Then } 9 + 9 = ??$$

Answer: _____