

1 Janet created a number pattern.

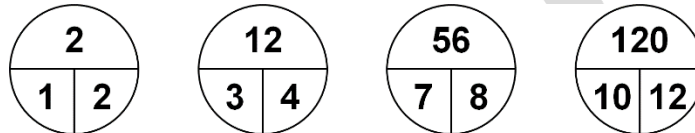
The first six numbers in Janet's number pattern are shown below.

1	5	9	13	17	21
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What number comes next in Janet's number pattern?

- A 25  
B 26  
C 27  
D 28  
E 29

2 The numbers in the four circles below follow the same pattern.



Which of these circles follows the same pattern of numbers as the four given circles?

- A D
- B E
- C

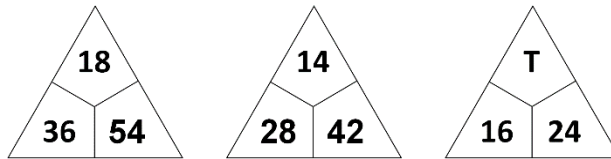
3 The numbers in each of the four brackets follow the same rule.

[5, 31, 4] [8, 53, 3] [2, 8, 6] [4, □, 7]

What number is □?

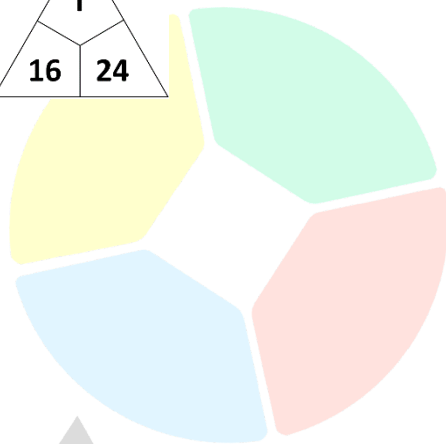
- A 16  
B 19  
C 21  
D 24  
E 45

4 The numbers in the three triangles below follow the same pattern.

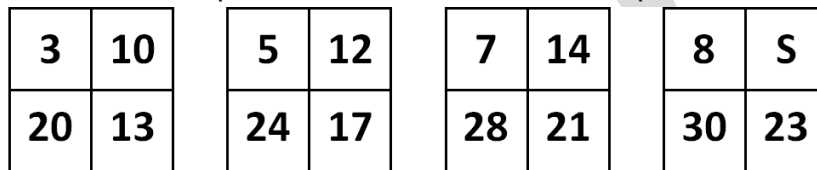


What number is T?

- A 6
- B 8
- C 10
- D 12
- E 16



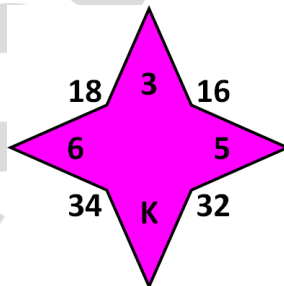
5 The numbers in the four squares below follow the same pattern.



What number is S?

- A 10
- B 12
- C 13
- D 15
- E 16

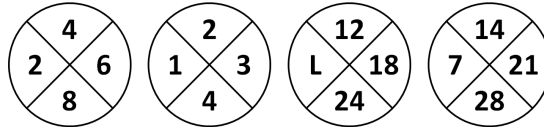
6 The numbers in the figure below follow a pattern.



What number is K?

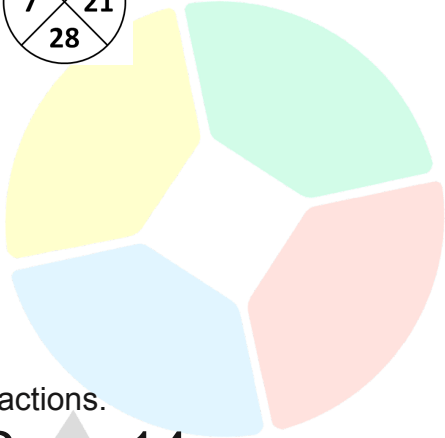
- A 12
- B 11
- C 9
- D 8
- E 6

7 The numbers in the four circles below follow the same pattern.



What number is L?

- A 3
- B 4
- C 5
- D 6
- E 8



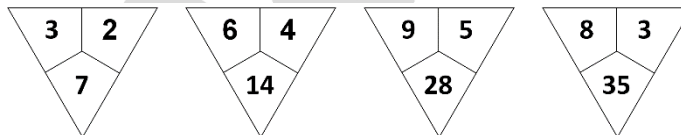
8 The fractions below show a pattern of equivalent fractions.

$$\frac{2}{7} = \frac{4}{14} = \frac{6}{21} = \frac{?}{42} = \frac{14}{49}$$

What numerator completes the pattern?

- A 7
- B 8
- C 9
- D 10
- E 12

9 The numbers in the four triangles below follow the same pattern.



Which triangle shows the same pattern of numbers as the four given triangles?

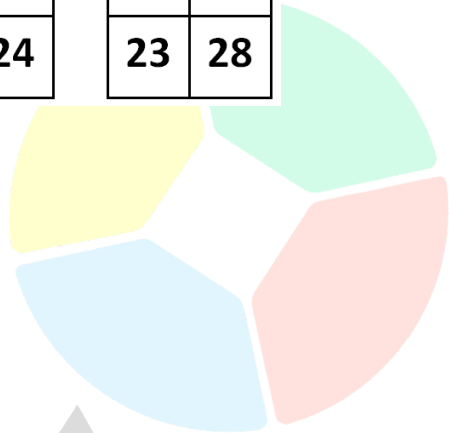
- A
- B
- C
- D
- E

10 The numbers in the four squares below follow the same pattern.

6	9	4	7	9	12	11	14
13	18	9	14	C	24	23	28

What number is C?

- A 19
- B 18
- C 16
- D 15
- E 13



11 Andrea created a number pattern.

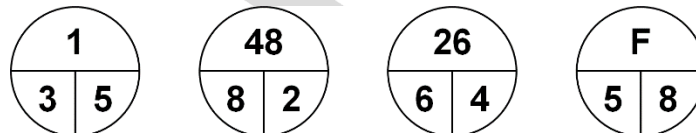
The first five numbers in Andrea's number pattern are shown below.

2	16	72	296	1 192
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What number comes next in Andrea's number pattern?

- A 4 776
- B 7 126
- C 9 552
- D 9 560
- E 9 956

12 The numbers in the four circles below follow the same pattern.



What number is F?

- A 3
- B 4
- C 13
- D 24
- E 36

13 The numbers in each of the four brackets follow the same rule.

[□, 2, 5] [9, 4, 3] [19, 8, 7] [27, 12, 9]

What number is □?

A 3

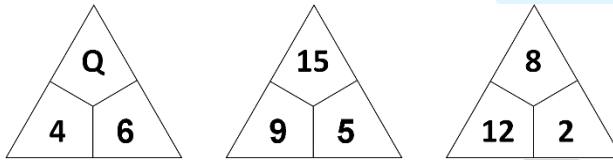
D 7

B 4

E 8

C 6

14 The numbers in the three triangles below follow the same pattern.



What number is Q?

A 12

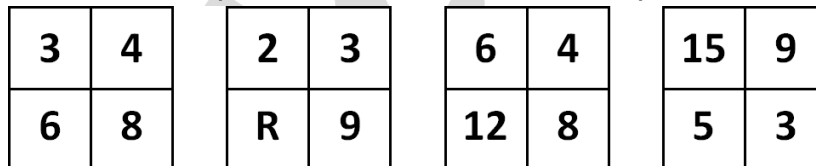
D 4

B 8

E 2

C 6

15 The numbers in the four squares below follow the same pattern.



What number is R?

A 4

D 8

B 5

E 12

C 6



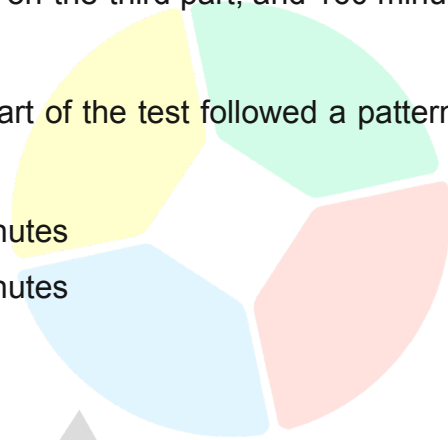
19 Dexter answered a four-part test.

He spent 20 minutes on the first part, 80 minutes on the third part, and 160 minutes on the fourth part.

If the number of minutes Dexter spent on each part of the test followed a pattern, how much time did he spend on the second part?

- A 30 minutes
- B 40 minutes
- C 50 minutes

- D 60 minutes
- E 70 minutes



20 Harry arranged several rows of chairs in the auditorium.

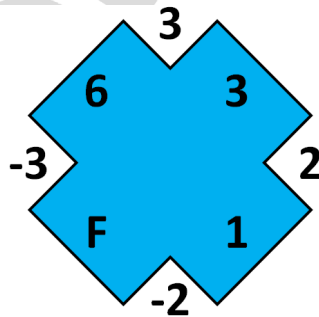
He put 4 chairs in the first row, 6 chairs in the second row, 10 chairs in the fourth row, 12 chairs in the fifth row, and 14 chairs in the sixth row.

If the number of chairs he put on each row followed a pattern, in which row did he put 28 chairs?

- A 12<sup>th</sup> row
- B 13<sup>th</sup> row
- C 14<sup>th</sup> row

- D 15<sup>th</sup> row
- E 16<sup>th</sup> row

21 The numbers in the figure below follow a pattern.

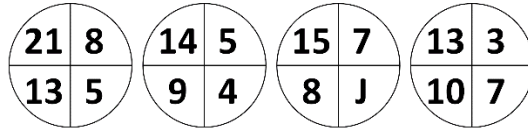


What number is F?

- A -6
- B -3
- C -1

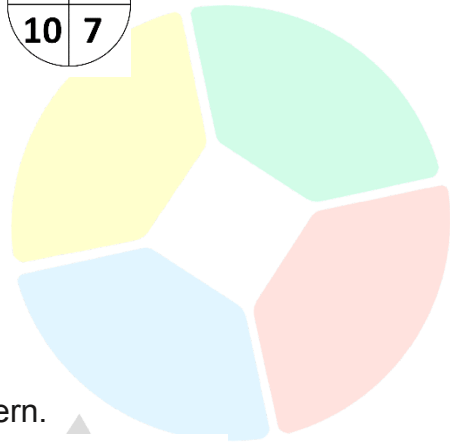
- D 1
- E 3

22 The numbers in the four circles below follow the same pattern.

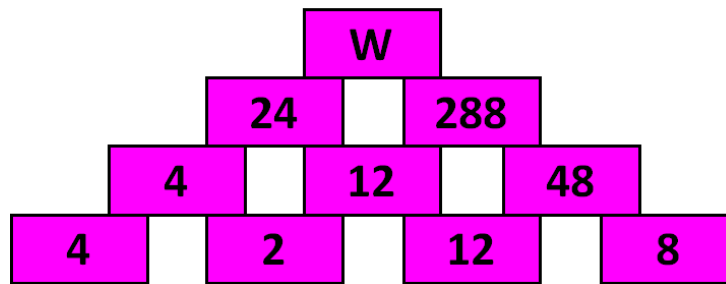


What number is J?

- A 1
- B 2
- C 3
- D 6
- E 8



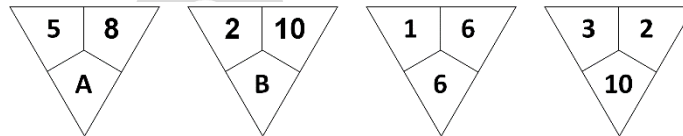
23 The numbers in the rectangles below follow a pattern.



What number is N?

- A 312
- B 624
- C 1 728
- D 3 456
- E 6 912

24 The numbers in the four triangles below follow the same pattern.

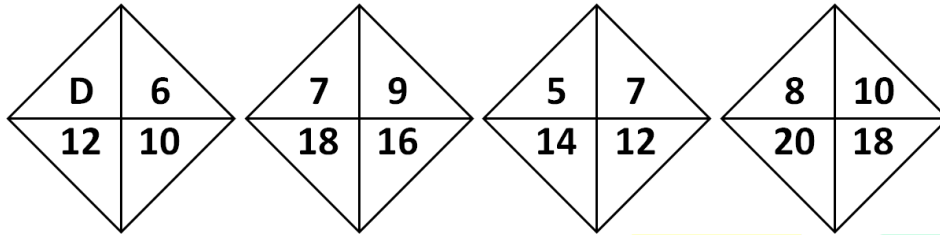


What is the value of A + B?

- A 40
- B 30
- C 20
- D 19
- E 11



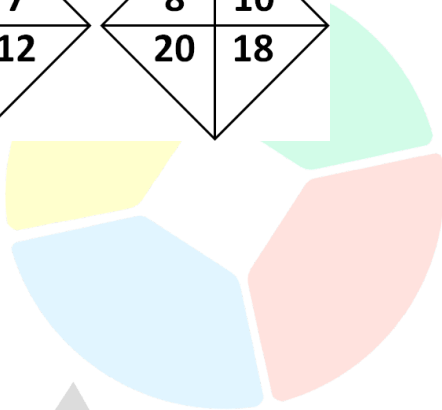
25 The numbers in the four squares below follow the same pattern.



What number is **K**?

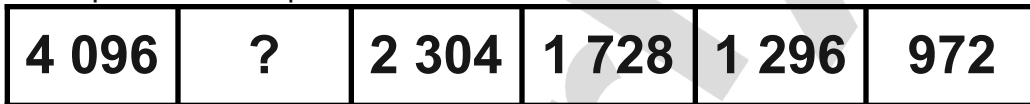
- A 2
- B 3
- C 4

- D 6
- E 9



26 Dorothy created a number pattern.

Her incomplete number pattern is shown below.

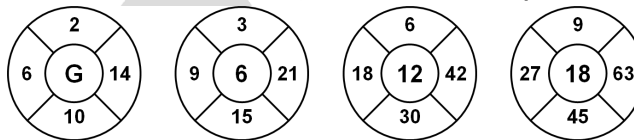


What number completes Dorothy's number pattern?

- A 3 072
- B 3 184
- C 3 240

- D 3 456
- E 3 896

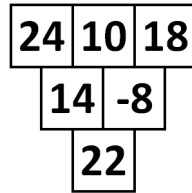
27 The numbers in the four circles below follow the same pattern.



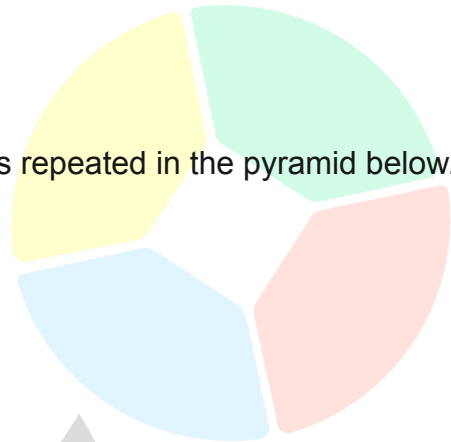
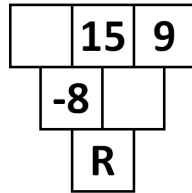
What number is **G**?

- A 1
- B 2
- C 3

- D 4
- E 5



The pattern of the numbers in the pyramid above is repeated in the pyramid below.



What number is **R**?

- A -14  
 B -10  
 C -2  
 D 2  
 E 14

29 What fraction comes next in this pattern?

$$\frac{1}{3}, \frac{3}{6}, \frac{9}{12}, \frac{27}{24}, \frac{81}{48}$$

- A  $\frac{162}{96}$   
 B  $\frac{243}{144}$   
 C  $\frac{243}{96}$   
 D  $\frac{108}{72}$   
 E  $\frac{108}{60}$

30 The numbers below follow a pattern.

9	10	40	41	205	206
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What number comes next in the number pattern?

- A 824  
 B 1 236  
 C 1 237  
 D 1 640  
 E 1 641

31 Frank created a number pattern.

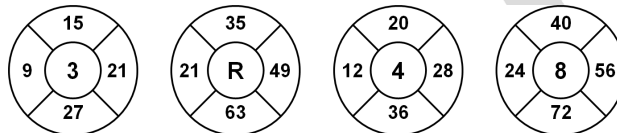
Frank's incomplete number pattern is shown below.



What number completes Frank's number pattern?

- A 66
- B 65
- A 64
- D 63
- E 61

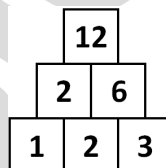
32 The numbers in the four circles below follow the same pattern.



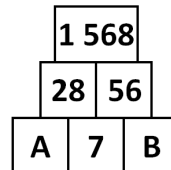
What number is R?

- A 5
- B 6
- C 7
- D 9
- E 10

33



The pattern of the numbers in the pyramid above is repeated in the pyramid below.



What is the value of A + B?

- A 4
- B 8
- C 12
- D 16
- E 24

34 What number comes next in this pattern?

**1, 11, 21, 1211, 111221, \_\_\_\_\_**

A 312211

D 1112211

B 2122211

E 111122211

C 122211

35 The numbers below follow a pattern.

<b>1</b>	<b>2</b>	<b>4</b>	<b>7</b>	<b>11</b>	<b>16</b>
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What number comes next in the number pattern?

A 20

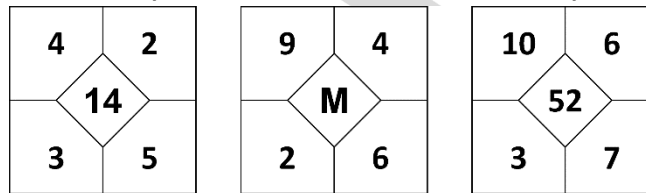
D 23

B 21

E 25

A 22

36 The numbers in the three squares below follow the same pattern.



What number is **M**?

A 48

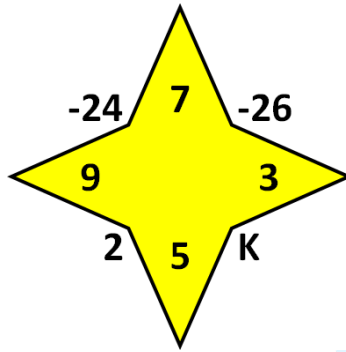
D 32

B 46

E 28

A 36

37 The numbers in the figure below follow a pattern.



What number is **K**?

A 0

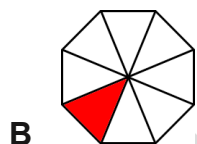
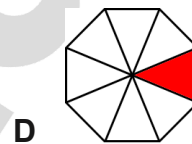
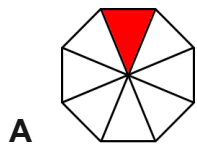
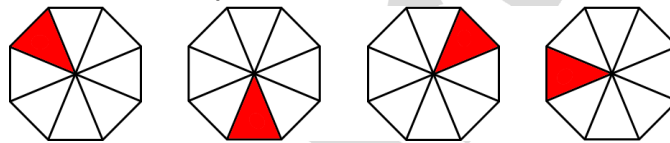
D 12

B 2

E 18

C 6

38 Which figure comes next in the pattern?



39 Some of the numbers in this addition grid are missing.

5			35	C o l u m T o t a l
20		15		
	30	Q	45	
90		20	150	
Row Total				

What number is Q?

- A 0
- B 5
- C 10
- D 15
- E 25

40 Each set of three numbers below follows the same rule.

4	2	16
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8	4	256
---	---	-----

2	1	1
---	---	---

F	5	625
---	---	-----

What number is F?

- A 50
- B 20
- C 12
- D 10
- E 6