



NAME _____

CLASS _____

Points: _____ Kangaroo leap: _____ Code: _____

Separate this answer sheet from the test. Write your answer under each problem number.

A right answer gives 3, 4 or 5 points. Every problem has exactly one right answer.

For each wrong answer, $\frac{1}{4}$ of the points of the problem will be deducted, for example for a 4 points problem -1 point. If you leave the answer empty, no deduction will be made.

There are two goals: to score as many points as possible or to have as many consecutive right answers as possible.

3 points

PROBLEM	1	2	3	4	5	6
ANSWER						

4 points

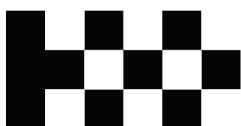
PROBLEM	7	8	9	10	11	12
ANSWER						

5 points

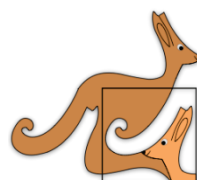
PROBLEM	13	14	15	16	17	18
ANSWER						

Contest not to be held before 25th of March 2019.

Logo design by Samin Ahmed.



Teknologiateollisuuden
100-vuotissäätiö



3 points

1.

Inside which cloud are all numbers smaller than 7?



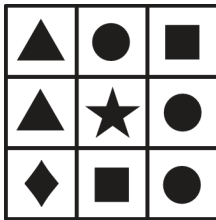
2.

The weight of Momma kangaroo and her cub is 60 kg in total. Momma kangaroo weighs 52 kg. How much does the cub weigh?

- (A) 2 kg (B) 4 kg (C) 8 kg (D) 30 kg (E) 46 kg

3.

Karen cut off a piece of this figure.

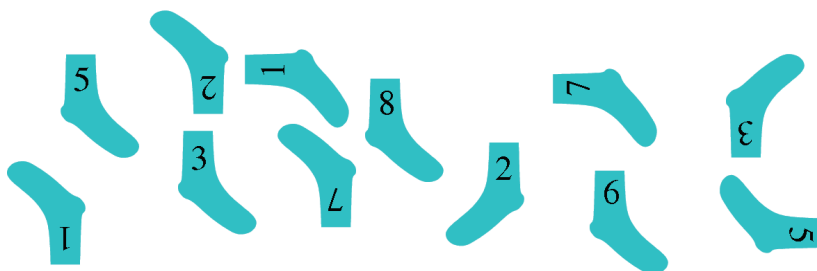


Which piece did she cut off?



4.

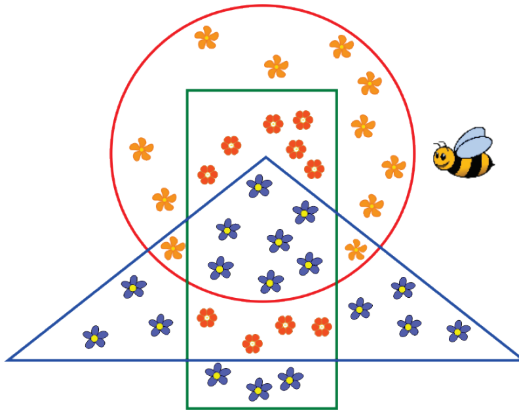
Jori forms pairs of such socks that have the same number on them. How many pairs does he get?



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

5.

A busy bee collects pollen from flowers that are inside the rectangle but outside the triangle. From how many flowers does the bee collect pollen?



(A) 9

(B) 10

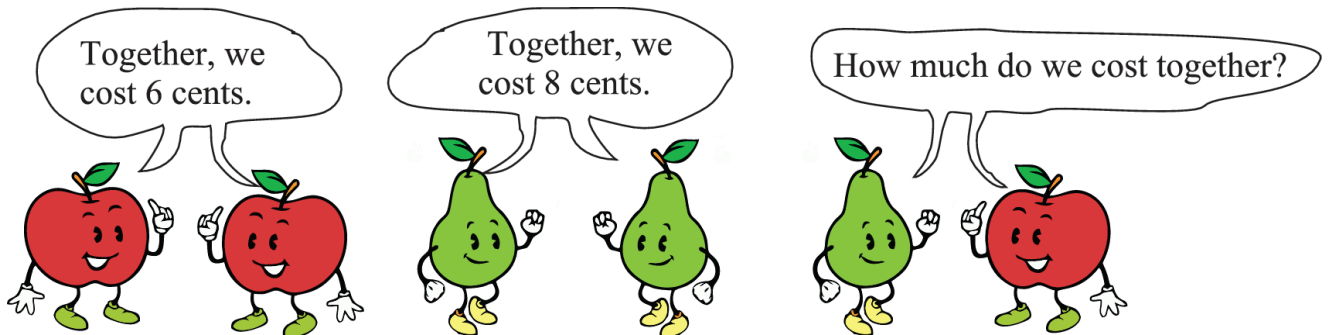
(C) 13

(D) 17

(E) 20

6.

How much do the fruits cost altogether?



(A) 5 cents

(B) 6 cents

(C) 7 cents

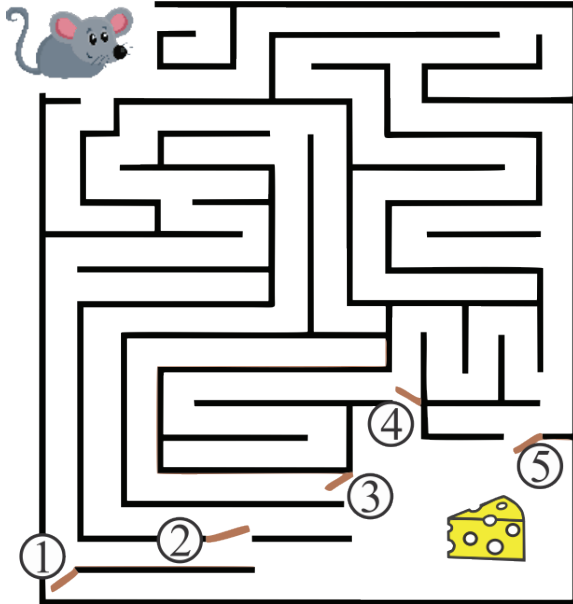
(D) 8 cents

(E) 9 cents

4 points

7.

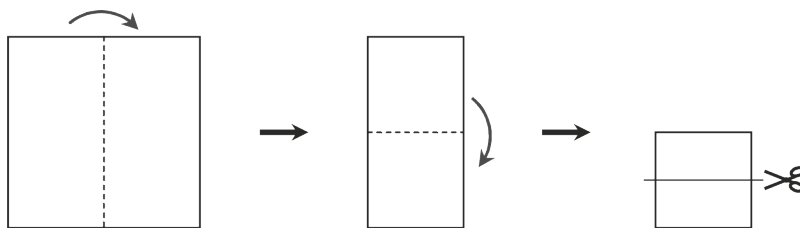
Which two gates have to be closed so that the mouse cannot get to the cheese?



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

8.

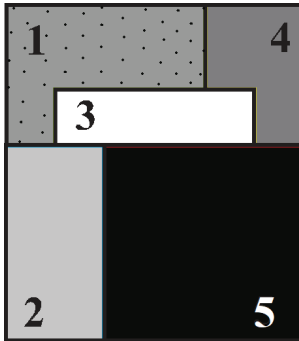
Patricia folds a paper two times as shown in the picture. Finally, she cuts the paper as shown. How many pieces of paper does Patricia get?



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

9.

Five square-shaped cards are placed on top of each other as shown in the picture.

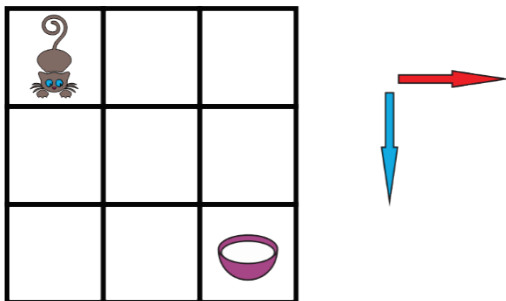


The cards are removed one by one so that the one on top always gets removed.
In what order are the cards removed?

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

10.

A cat and a bowl of cream are in the opposite corners of the grid.



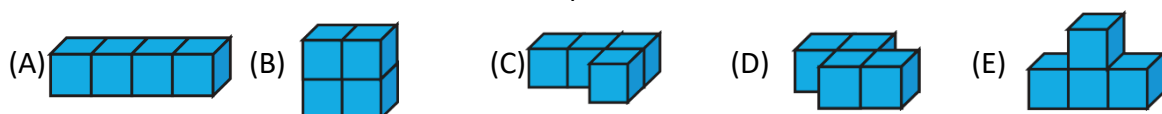
The cat can only move towards the directions shown by the arrows.
How many different routes can the cat take to the cream bowl?

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

11.

These bricks were made by glueing four same sized cubes together. After glueing, the bricks are painted.

Which of the bricks has the smallest area to paint?



12.

A train leaves from the station Kang at 6.00 in the morning.
Then, it passes by three stations without stopping.
The digits show the travelling time between the stations.
The train arrives at Aroo station at 23.00 in the evening.
How many hours does it take to Aroo from the last station before it?



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

5 points

13.

On a farm there are only sheep and cows.
There are 8 sheep more than cows.
There are cows half as much as there are sheep.
How many animals are there in the farm altogether?

- (A) 16 (B) 18 (C) 20 (D) 24 (E) 28

14.

A figure is cut into three pieces.



Which one of the following figures is the original one?

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

15.

In a zoo there are 10 camels. A camel can have either 1 or 2 humps on its back. In total, there are 14 humps. How many 2-hump camels are there in the zoo?

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

16.

The squirrels Pip, Tat and Dod collected 7 nuts altogether. Each one of them collected a different amount of nuts and all of them collected at least one nut. Pip collected the least and Dod collected the most.

How many nuts did Tat collect?

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






17.

There were 9 squares in the figure:



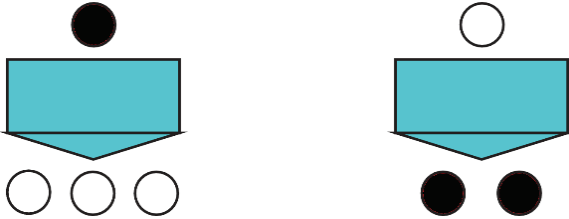
First, Ann substituted all of the black squares with white ones.
After that, Bob substituted all of the grey squares with black ones.
Finally, Chris substituted all of the white squares with grey ones.

What does the figure look like in the end?

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

18.

Amalia has a machine that at a time turns either a black ball into three white balls or a white ball into two black balls.



At first, Amalia has three black balls and one white ball: ●●●○

She then uses the machine three times.

What is the smallest amount of balls she can have in the end?

(A) 5

(B) 6

(C) 7

(D) 8

(E) 9