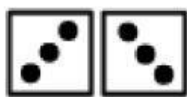


### MATH 3

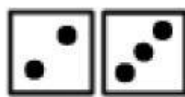
1. Amy, Bert, Carl, Doris and Ernst each rolled two dice and added the number of dots.



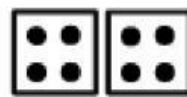
Amy



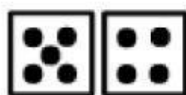
Bert



Carl



Doris



Ernst

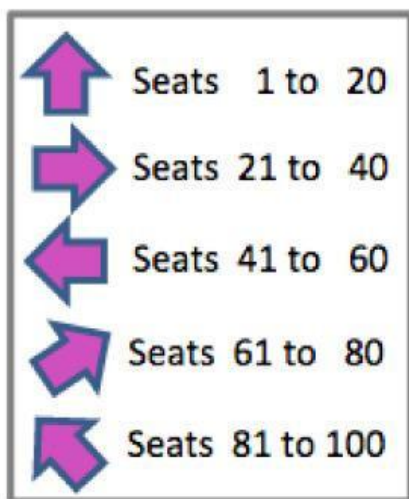
Who rolled the largest total?

- A. Amy
- B. Bert
- C. Carl
- D. Doris
- E. Ernst

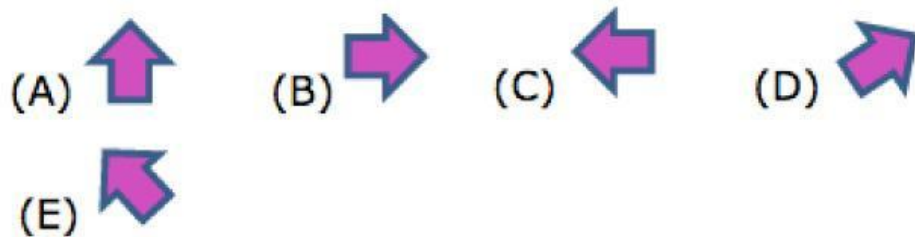
2. Peter is guessing Paul's password. Peter knows that Paul used only digits for the last three places and that it has at most three capital letters. Which of the following choices could be Paul's password?

- A. PAUL123
- B. Palu2L3
- C. LUap4321
- D. Paulin3
- E. 123PAUL

3. George and his father go to the circus. Their seat numbers are 71 and 72. The sign below shows where the seats are.



Which way should they go?



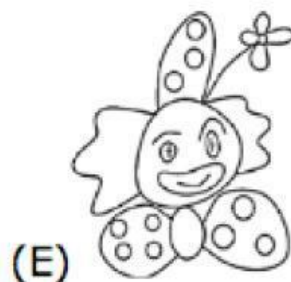
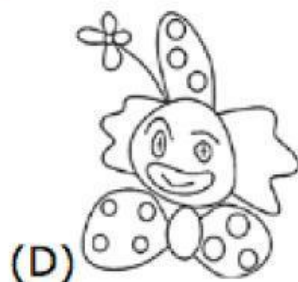
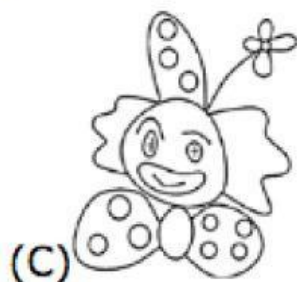
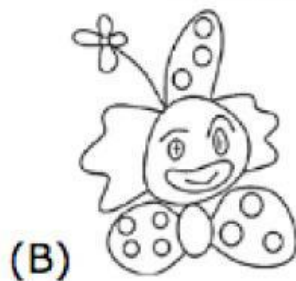
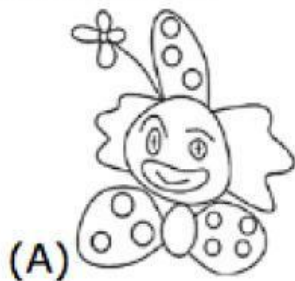
A  
B  
C  
D  
E

4. Richard dries grapes to obtain raisins. He gets 1 kilogram of raisins out of 4 kilograms of grapes. How many kilograms of grapes will he need in order to obtain 4 kilograms of raisins?

- A. 12 kg
- B. 16 kg
- C. 20 kg
- D. 25 kg
- E. 50 kg

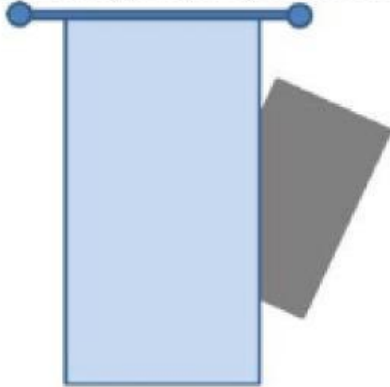


5. What does Pipo see when he looks at himself in the mirror?



- A
- B
- C
- D
- E

6. A rectangle is partly hidden behind a curtain. What is the shape of the hidden part?



- A. A Triangle
- B. A square
- C. A hexagon
- D. A circle
- E. A rectangle

7. Anna shared her apples among herself and five friends. If everyone got half an apple, how many apples did she share?

- A. 2 and a half
- B. 3
- C. 4
- D. 5
- E. 6

8. Which of the following is true about this picture?

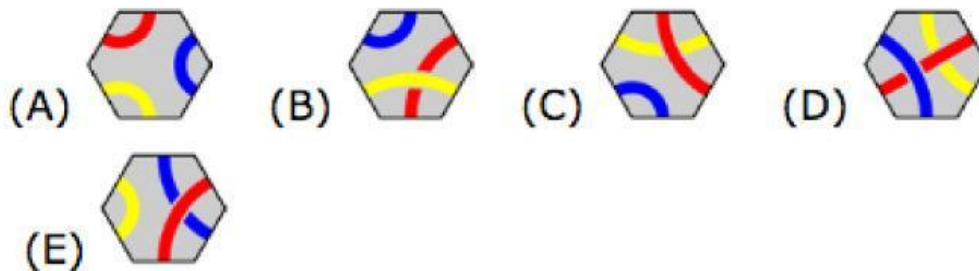
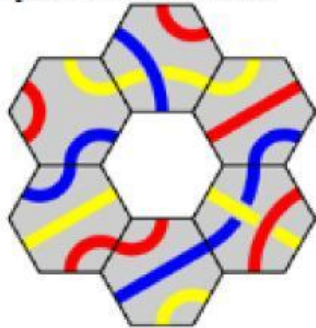


- A. There are as many circles as squares.
- B. There are fewer circles than triangles.
- C. There are twice as many circles as triangles.

- D. There are more squares than triangles
- E. There are two triangles more than circles.

**9. Part B: Each correct answer is worth 4 points**

Which tile fits in the middle such that lines of the same colour are joined together? (Turning the middle tile is allowed.)

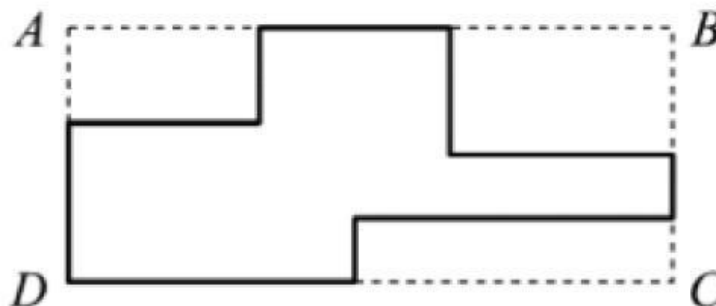


- A
- B
- C
- D
- E

10. The sum of the digits of the number 2016 is equal to 9:  $2 + 0 + 1 + 6 = 9$ . What is the next number that is greater than 2016 with the sum of its digits equal to 9?

- A. 2007
- B. 2025
- C. 2034
- D. 2108
- E. 2134

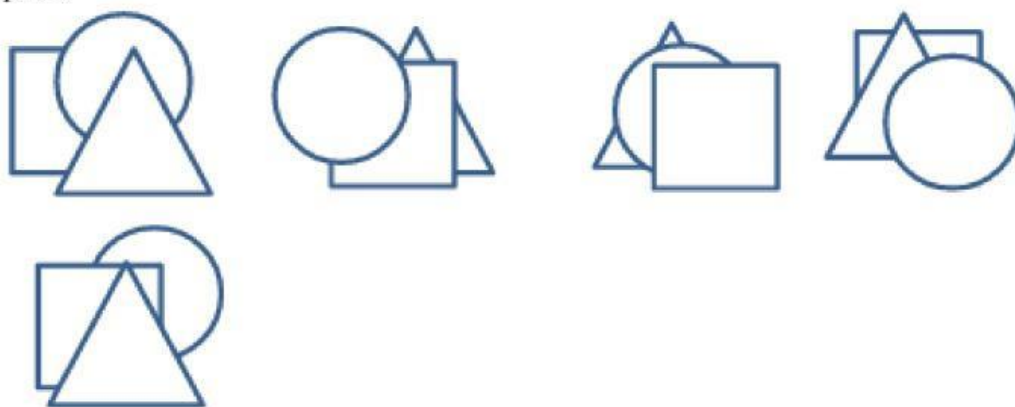
11. The perimeter of the rectangle ABCD is 30 cm. Lisa cut off three rectangles as shown.



She found that the sum of the three perimeters is equal to 20 cm. What is the perimeter of the figure obtained after the cutting?

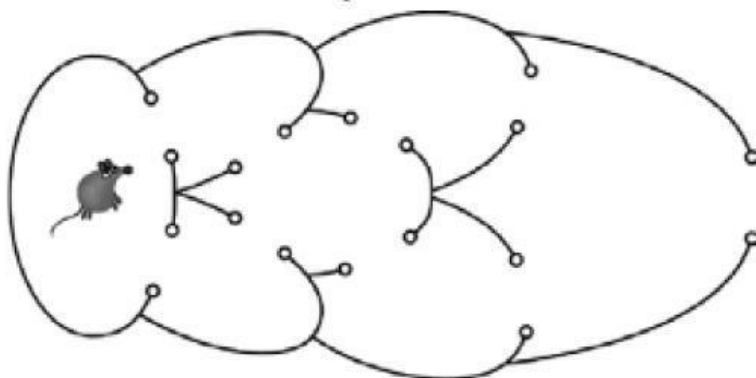
- A. 50 cm
- B. 40 cm
- C. 30 cm
- D. 10 cm
- E. impossible to determine

12. Five children had each a paper square, a paper triangle and a paper circle. Every child put their own papers in a pile, as shown in the pictures. How many children put the triangle after the square?



- A. 0
- B. 1
- C. 2
- D. 3
- E. 4

13. The mouse wants to escape from the maze.

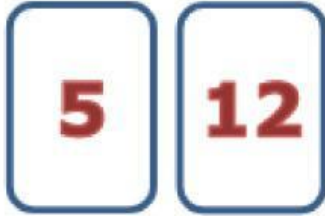


How many different paths can the mouse take without passing through the same opening more than once?

- A. 2
- B. 4
- C. 5
- D. 6

E. 7

14. Zoe has two cards with numbers on both sides of the cards – four numbers in total. The sum of the four numbers equals 32; the sum of the two numbers on the first card is equal to the sum of the two numbers on the second card. What are the hidden numbers?



- A. 8 and 7
- B. 8 and 6
- C. 11 and 4
- D. 9 and 6
- E. 10 and 5

15. A farmer has the same number of chickens, sheep and goats. Together all these animals have 180 legs. How many goats live on this farm?

- A. 15
- B. 16
- C. 18
- D. 21
- E. 60