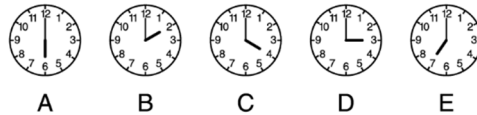19. Hermione, Harry and Ron always walk into the common room one at a time. Hermione is never first, Harry is never second and Ron is never third. In how many different orders could they walk in?

(A) 1      (B) 2      (C) 3      (D) 4      (E) 6

20. There are five clocks on the wall. It is known that one clock is an hour fast, one clock is an hour slow, one clock shows the correct time and two clocks have stopped. Which clock shows the correct time?



A     B     C     D     E

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

21. Adam and Brenda have 9 marbles each. Together, they have 8 red and 10 blue marbles. Brenda has twice as many blue marbles as red marbles. How many blue marbles does Adam have?
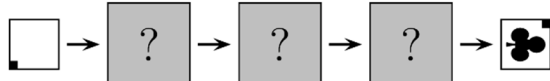
(A) 3      (B) 4      (C) 5      (D) 6      (E) 0

22. Liza has two machines. When she puts a square sheet of paper in machine R, it turns the paper 90° clockwise, as shown in the picture.

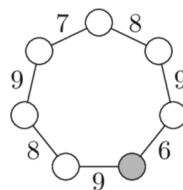When she puts the paper in machine S, it stamps the paper with a ♣.

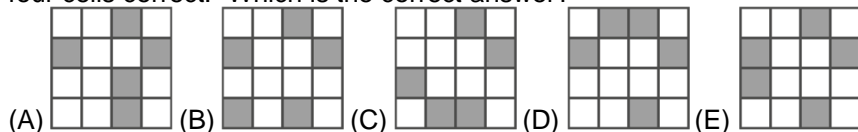In which order are the machines used to produce the result shown?

(A) SRR      (B) RSR      (C) RSS      (D) RRS      (E) SRS

23. Hellen wants to write the numbers 1 to 7 in the circles. Inside each circle she writes 1 number. She wants the sum of the numbers in 2 circles that are next to each other to be as shown. What number must Hellen write inside shaded circle?



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

24. Maria has shaded exactly 5 cells in a 4 × 4 grid. She challenges 5 of her friends to guess which cells she has shaded. The grids they have drawn are shown below. Maria looks at them and says: "One of you is right and each of the rest of you has four cells correct." Which is the correct answer?



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

*Laiks uzdevumu risināšanai – 75 minūtes!*

*3 point problems*

1. Akira lits 5 identical candles all at the same time. They stopped burning at different times and now look as shown in the picture. Which candle stopped burning first?
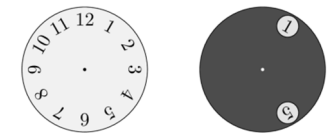


A B C D E

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

2. The 2 kangaroo coins with the question mark on have the same value. What is this value?
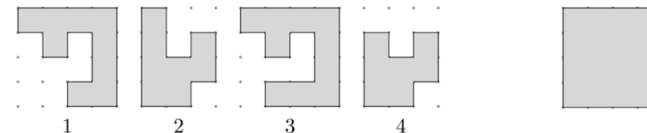


$$20 + 10 + 10 + ? + ? + 1 = 51$$

(A) 1      (B) 2      (C) 5      (D) 10      (E) 20

3. A black circle with 2 large holes in it is put on top of a clock-face, as shown. The black circle is turned around its center. Which 2 numbers is it possible to see at the same time?
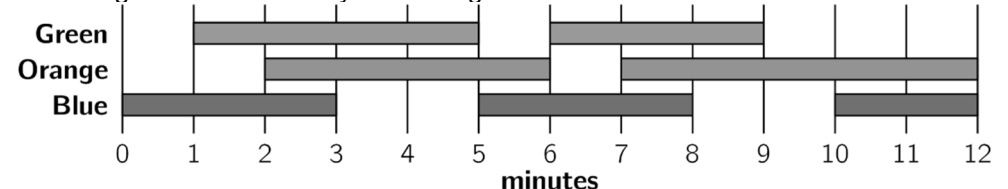


(A) 4 and 9    (B) 5 and 9    (C) 5 and 10    (D) 6 and 9    (E) 7 and 12

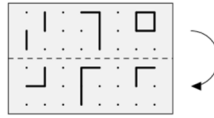4. Alice has four puzzle pieces. Which 2 pieces can she put together to form the square?



1     2     3     4

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

5. A light engineer in the theatre turns the lights on and off. He uses the plan shown. How long in total are exactly 2 of the lights on at the same time?



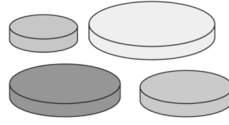(A) 2 minutes    (B) 6 minutes    (C) 8 minutes    (D) 9 minutes    (E) 10 minutes

6. Kristina has a piece of transparent paper with some lines marked on it. She folds it along the dashed line. What can she now see?

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

7. Anna has 4 discs of different sizes. She wants to build a tower of 3 discs so that every disc is smaller than the disc below it. How many different towers can Anna make?
(A) 1 (B) 2 (C) 4 (D) 5 (E) 6

8. Danny glued the 2 pieces of paper on top of the black circle. What can he not obtain?

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

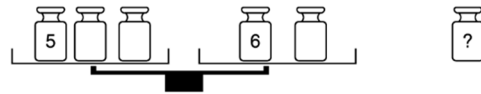*4 point problems*

9. The shape on the right is covered with the 5 pieces below. Which piece will cover the dot?

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

10. There are six weights of 1, 2, 3, 4, 5 and 6 kg. Rosita puts five of them on the scales and puts one weight aside. The scales balance. Which weight did she put aside?
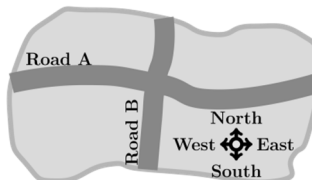(A) 1 kg (B) 2 kg (C) 3 kg (D) 4 kg (E) can't be sure

11. Ali has a 60 cm ruler. Unfortunately, some of the markings have faded away. He is able to measure any of the lengths 10, 20, 30, 40, 50 and 60 cm using his ruler only once. Which is Ali's ruler?

(A) 10 30 / 60 cm (B) 20 40 / 60 cm (C) 30 50 / 60 cm (D) 10 20 / 60 cm (E) 10 40 / 60 cm

12. There are 7 houses north of Road A, 8 houses east of Road B and 5 houses south of Road A. How many houses are west of Road B?
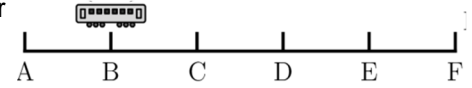(A) 4 (B) 5
(C) 6 (D) 7 (E) 8

13. There are 8 cars waiting in a queue for the ferry. Every car contains either 2 or 3 people. There are 19 people in total waiting for the ferry. How many cars contain exactly 2 people?
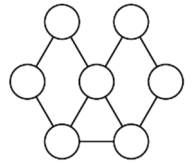(A) 2 (B) 3 (C) 4 (D) 5 (E) 6

14. The Metro line has 6 stations, A, B, C, D, E, and F. A and F are the end stations. The train stops at every station. When it reaches one of the two end stations, it changes its direction. The train driver started driving at station B and his first stop was station C. Which station will be his 96th stop?
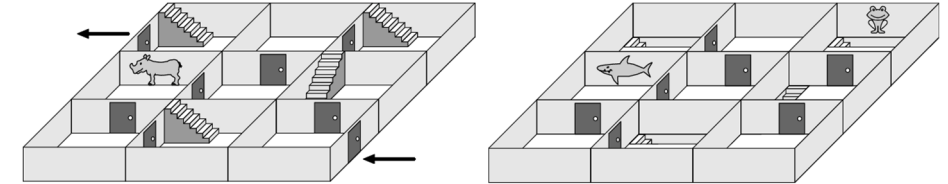(A) A (B) B (C) C (D) D (E) E

15. Eva wants to paint the circles in the picture. She wants to paint any 2 circles connected with a line different colours. What is the smallest number of colours she needs?
(A) 2 (B) 3 (C) 4 (D) 5 (E) 6

16. Sofia walks through a two-storey maze from the entrance to the exit, both located at floor 1. In what order will she find the wall stickers?

1    2

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

*5 point problems*

17. 6 beavers and 2 kangaroos are standing in a line. Amongst any 3 consecutively numbered animals, exactly 1 is a kangaroo. Which numbered animal is a kangaroo?
(A) 1 (B) 2 (C) 3 (D) 4 (E) 5

18. Rebecca folds a square piece of paper twice. Then she cuts off one corner. Next, she unfolds the paper. What does the paper look like once unfolded?

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

3.-4. klases

3.-4. klases