

### 3 point problems

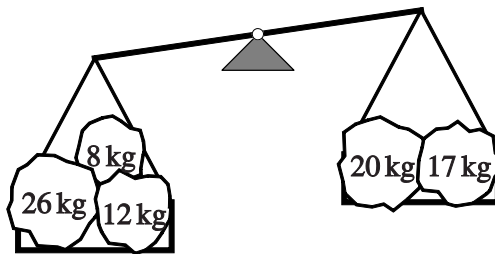
#### PROBLEM 01

Basil wants to paint the word KANGAROO. He paints one letter each day. He starts on Wednesday. On what day will he paint the last letter?

- (A) Monday (B) Tuesday (C) Wednesday  
(D) Thursday (E) Friday

#### PROBLEM 02

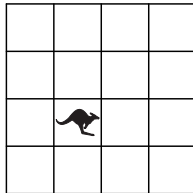
A caveman wants to balance the two set of stones shown in the picture. Which extra stone should he put on the right-hand side to make both sides equally heavy?



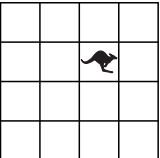
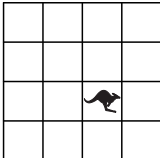
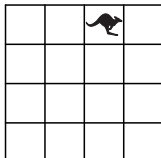
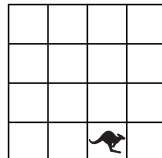
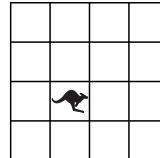
- (A) 5 kg (B) 7 kg (C) 9 kg (D) 11 kg (E) 13 kg

#### PROBLEM 03

A toy kangaroo is on one square of a board, as shown in the picture.



A child moves the toy from one square to a neighbouring square. He uses the following order: first to the right, then upwards, then to the left, then downwards, and then to the right. Which of the following pictures shows where the toy will be at the end?

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

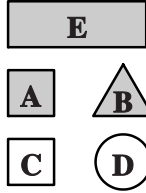
#### PROBLEM 04

Simon got up one hour and a half ago. In three hours and a half, he will take the train to grandmother's. How long before the train departure did he get up?

- (A) 2 hours (B) 3 and a half hours (C) 4 hours (D) 4 and a half hours (E) 5 hours

**PROBLEM 05**

Maria described one of the five figures below in the following way. "It is not a square. It is grey. It is either round or triangular." Which figure did she describe?



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

**PROBLEM 06**

Lenka paid 1 euro and 50 cents for three scoops of ice-cream. Miso paid 2 euros and 40 cents for two cakes. How much did Igor pay for one scoop of ice-cream and one cake?

- (A) 1 euro 70 cents
- (B) 1 euro 90 cents
- (C) 2 euro 20 cents
- (D) 2 euro 70 cents
- (E) 3 euro 90 cents

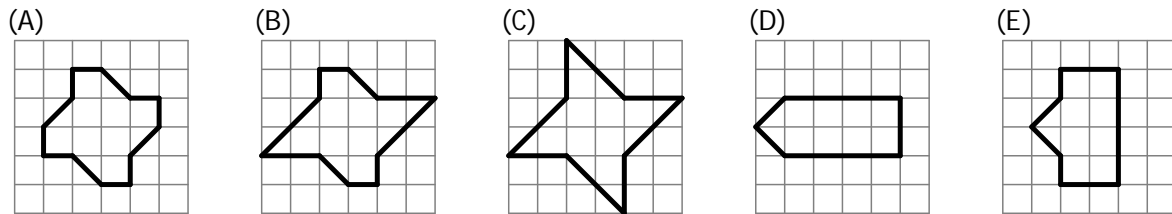
**PROBLEM 07**

A tower clock strikes on the hour (that is, at 8:00, 9:00, 10:00 and so on) as many times as the hour. The clock also strikes once when the time is half past an hour (that is, at 8:30, 9:30, 10:30 and so on). How many times did the clock strike from 7:55 to 10:45?

- (A) 6
- (B) 18
- (C) 27
- (D) 30
- (E) 33

**PROBLEM 08**

Which figure has the largest area?



**4 point problems**

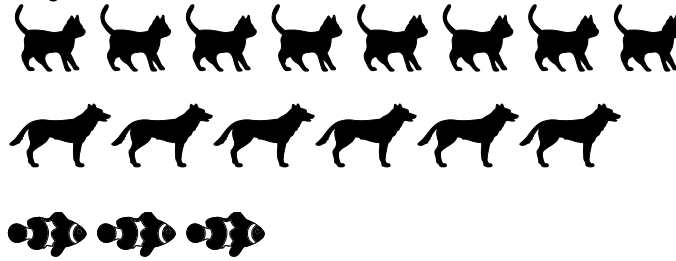
**PROBLEM 09**

The poulterer has boxes of 6 eggs and boxes of 12 eggs. What is the smallest number of boxes he needs in order to store 66 eggs?

- (A) 5
- (B) 6
- (C) 9
- (D) 11
- (E) 13

**PROBLEM 10**

In a school class all pupils have at least one pet and at most two pets. The pupils have recorded how many pets they have all together.



Among the pupils two have both a dog and a fish. Three of the pupils have both a cat and a dog. How many pupils are there in this class?

- (A) 11                      (B) 12                      (C) 13                      (D) 14                      (E) 17

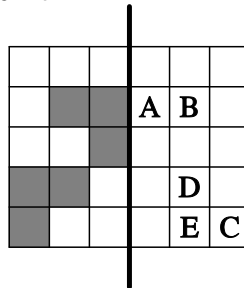
**PROBLEM 11**

There are 13 coins in John's pocket. Each coin is either 5 or 10 cents. Which of the following cannot be the total value of John's coins?

- (A) 80 cents              (B) 60 cents              (C) 70 cents              (D) 115 cents              (E) 125 cents

**PROBLEM 12**

The sheet shown in the picture is folded along the thick line. Which letter will not be covered by a grey square?



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

**PROBLEM 13**

Ann, Bob, Cleo, Dido, Eef, and Fer each roll a die. They all get different numbers.

The number Ann rolled is twice Bob's number.

The number Ann rolled is three times Cleo's.

The number Dido rolled is four times Eef's.

What number did Fer roll?

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

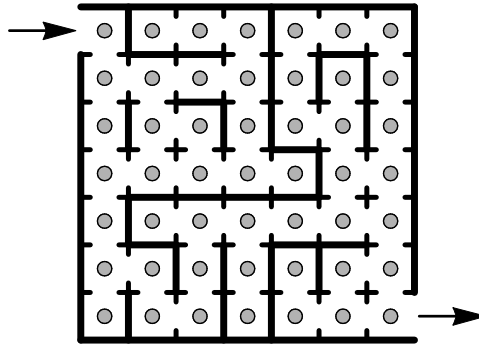
**PROBLEM 14**

A quiz show has the following rules. Every participant has 10 points at the beginning and has to answer 10 questions. For a correct answer 1 point is added and for an incorrect answer 1 point is taken away. Mrs Smith had 14 points at the end of the quiz show. How many incorrect answers did she give?

- (A) 3                      (B) 4                      (C) 5                      (D) 6                      (E) 7

**PROBLEM 15**

The picture shows a magic maze.



At each square of the maze there is a piece of cheese. Mouse Ron enters the maze and wants to leave with as many pieces of cheese as he can. He cannot step on any square twice. What is the largest number of pieces of cheese he can get?

- (A) 17
- (B) 33
- (C) 37
- (D) 41
- (E) 49

**PROBLEM 16**

During a party each of two identical cakes was divided into four equal parts. Then each of these parts was divided into three equal slices. Each person at the party got a slice of cake and three slices were left over. How many people were at the party?

- (A) 24
- (B) 21
- (C) 18
- (D) 27
- (E) 13

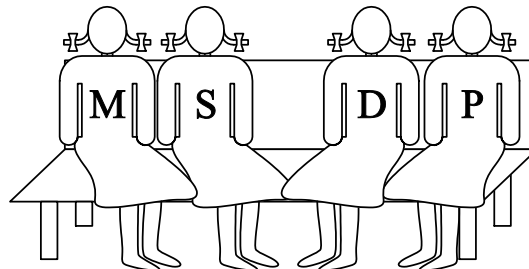
**5 point problems**

**PROBLEM 17**

Four girlfriends Masha, Sasha, Dasha and Pasha sit on a bench as seen.

First Masha exchanged places with Dasha.  
Then Dasha exchanged places with Pasha.

At the end the girls sat on the bench in the following order from left to right, as shown in the picture:  
Masha, Sasha, Dasha, Pasha.

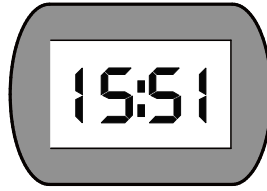


In what order from left to right did they sit in the beginning?

- (A) Masha, Sasha, Dasha, Pasha
- (B) Masha, Dasha, Pasha, Sasha
- (C) Dasha, Sasha, Pasha, Masha
- (D) Sasha, Masha, Dasha, Pasha
- (E) Pasha, Masha, Sasha, Dasha

**PROBLEM 18**

The digital watch in the picture shows two different digits.

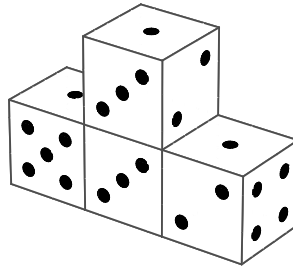


How many times a day does this watch show the same digit in all four positions?

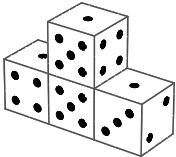
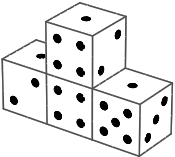
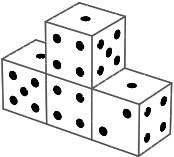
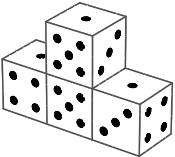
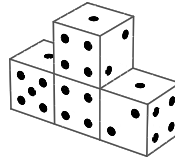
- (A) 1                      (B) 24                      (C) 3                      (D) 5                      (E) 12

**PROBLEM 19**

The picture shows an arrangement of four identical dice.



On each die, the total number of pips on each pair of opposite faces is 7. What does the arrangement look like from behind?

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

**PROBLEM 20**

You have the three cards shown in the picture.



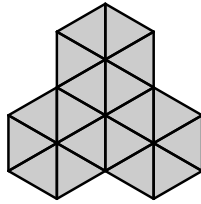
You can form different numbers with them, for example 989 or 986.

Altogether, how many different 3-digit numbers can you form with these three cards?

- (A) 4                      (B) 6                      (C) 8                      (D) 9                      (E) 12

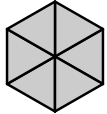
**PROBLEM 21**

Andra wants to make the pattern in the picture by using pieces of one single shape several times.



The pieces cannot cover each other. Which of the following pieces cannot be used by Andra to make the pattern?

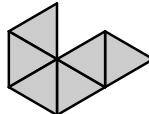
(A)



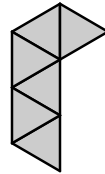
(B)



(C)



(D)

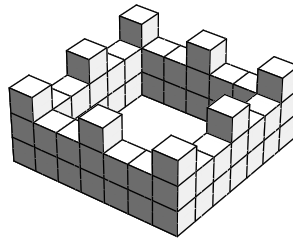


(E)

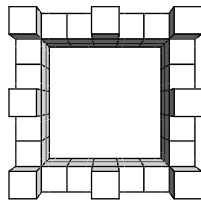


**PROBLEM 22**

The picture shows a castle built from cubes.



When you look at the same castle from above it looks like the next picture.



How many cubes were used to build the castle?

(A) 56

(B) 60

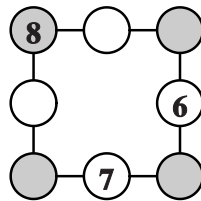
(C) 64

(D) 68

(E) 72

**PROBLEM 23**

John has written 6, 7 and 8 in three of the circles shown in the picture.



He now writes each of the numbers 1, 2, 3, 4 and 5 in the remaining circles so that the sum of the numbers along each side of the square is equal to 13. What will be the sum of the numbers in the shaded circles?

(A) 12

(B) 13

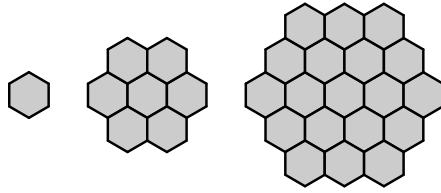
(C) 14

(D) 15

(E) 16

**PROBLEM 24**

Sylvia drew three shapes made from hexagons, as shown in the picture.



She continues with this pattern. How many hexagons will the fifth figure contain?

(A) 37

(B) 49

(C) 57

(D) 61

(E) 64