

Ecolier

3-Point-Problems

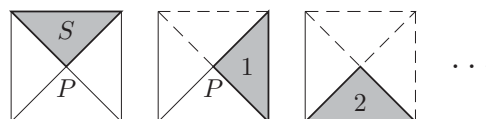
1. (E3.6) A butterfly sat down on a correctly solved exercise. What number is the butterfly covering?

$$2005 - 205 = 1300 +$$



- (A) 250 (B) 400 (C) 500 (D) 910 (E) 1800

2. (RO E.5) Peter is turning the triangle around point P as shown in the picture. In which position the triangle will appear after 17 moves?



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

3. (E4.5) Erika bought cookies, each of them costs 3 euros. She gave 10 euros and obtained 1 euro of the change. How many cookies did Erika buy?

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

4. (E4.31) There are eight kangaroos in the cells of the table (see the picture). Find the least number of the kangaroos which have to jump into the other cells so that exactly two kangaroos remain in any row and in any column of the table.

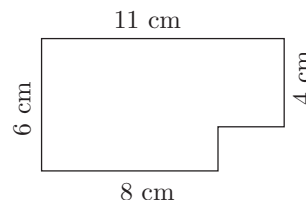
- (A) 4 (B) 3 (C) 2 (D) 1 (E) 0

5. (E3.2) Helga lives in her home with father, mother, brother, one dog, two cats, two parrots and four fish. What is the total number of legs they altogether have?

- (A) 22 (B) 24 (C) 28 (D) 32 (E) 40

6. (E3.10) John has a chocolate tablet consisting of square pieces of 1×1 cm. He has eaten already some pieces in a corner (see the picture). How many pieces John still have?

- (A) 66 (B) 64 (C) 62 (D) 60 (E) 58



7. (ENP.11) Daniel wants to fill a tank for his turtle with 4 buckets of water. At each trip he fills one bucket from a faucet but when walking to the tank he spills one half of the water. How many trips from the faucet to the tank does he have to do?

- (A) 4 (B) 5 (C) 6 (D) 7 (E) 8

8. (E3.1) What is the smallest possible number of children in the Jones family if each child has at least one brother and one sister?

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

4-Point-Problems

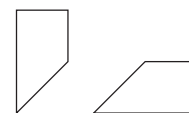
9. (E3.9) After the first whistle of the trainer the monkeys in the circus formed 6 rows. In every row there were 4 monkeys. After the second whistle they have rearranged themselves into 8 rows. How many monkeys were in every row after the second whistle?

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

10. (ENP.23) Among the five numbers below, the one I chose is even. All its digits are different. The hundreds' digit is double the units' digit, the tens' digit is higher than the thousands' digit. Which one did I choose?

- (A) 1246 (B) 3874 (C) 4683 (D) 4874 (E) 8462

11. (ENP.14) A square piece of paper has been cut in three pieces. Two of them are in the picture on the right. What is the third one?



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

12. (E4.37) There were 9 pieces of paper. Some of them got cut into three parts. Altogether, there became 15 pieces of paper. How many pieces were cut into parts?

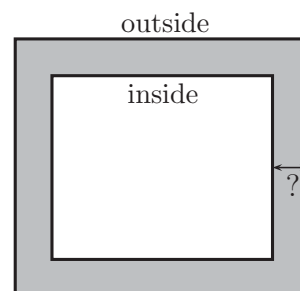
- (A) 1 (B) 2 (C) 3 (D) 4 (E) 5

13. (E4.25) Three fleas were walking along the number line. When they got tired, the flea Alice sat on the number 24, the flea Betty sat on the number 66. Finally, the flea Cynthia sat just in the middle between Alice and Betty. On which number is Cynthia sitting?

- (A) 33 (B) 35 (C) 42 (D) 45 (E) 48

14. (ENP.6) Around a rectangular garden there is a path. The path has everywhere the same width. The outside edge of the path is 8 meters longer than the inside edge. What is the width of the path?

- (A) 1 meter (B) 2 meter
(C) 4 meter (D) 8 meter
(E) depends on the measurements of the garden



15. (E4.10) In a trunk there are 5 chests, in each chest there are 3 boxes, and in each box there are 10 gold coins. The trunk, the chests, and the boxes are locked. How many locks must be opened in order to get 50 coins?

- (A) 5 (B) 6 (C) 7 (D) 8 (E) 9

16. (E4.12) Two cats Tiny and Tony and two dogs Dim and Dill meet each other sometimes. Tiny is afraid of both dogs, and Tony is afraid of Dim and is on friendly terms with Dill. What statement is false?

- (A) Each cat fears some dog (B) Some cat does not fear some dog
(C) There is a dog that frightens both cats (D) Each dog frightens some cat
(E) There is a dog friendly to both cats

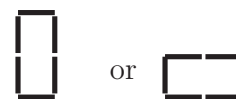
5-Point-Problems

17. (ENP.21) The elevator can not carry more than 150 kg. Four friends weigh: 60 kg, 80 kg, 80 kg and 80 kg. At least how many runs of the elevator are necessary to carry the four friends to the highest floor.

- (A) 1 (B) 2 (C) 3 (D) 4 (E) 7

18. (E4.34) Using six matches you can make only one rectangle (see the picture). How many different rectangles can you compose using 14 matches?

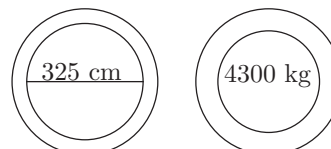
- (A) 2 (B) 3 (C) 4 (D) 6 (E) 12



19. New Each of seven kangaroo have eaten the same number of sandwiches. The total number of sandwiches they have eaten has a three digits number $3\square 0$. Which is the digit in the middle?

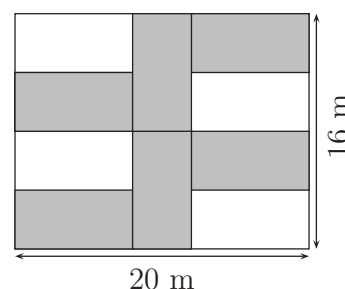
- (A) 3 (B) 4 (C) 5 (D) 6 (E) 7

20. (E5.5) Two traffic signs mark the bridge in my village. These marks indicate the maximum width and the maximum weight available. Which one of the following trucks is allowed to cross that bridge:



- (A) the one 315 cm wide and weighing 4307 kg
 (B) the one 330 cm wide and weighing 4250 kg
 (C) the one 325 cm wide and weighing 4400 kg
 (D) the one 322 cm wide and weighing 4298 kg
 (E) it is impossible to determinate

21. (E5.13) The figure shows a rectangular garden with dimensions 16 m and 20 m. The gardener has planted six identical flowerbeds (they are gray in the diagram). What is the perimeter of each of the flowerbeds?



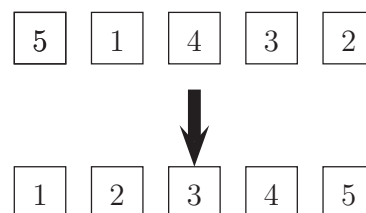
- (A) 20 m (B) 22 m (C) 24 m (D) 26 m (E) 28 m

22. (E3.16) Mike choose a three-digit number and a two-digit number. Find he sum of these numbers if their difference equals 989.

- (A) 1000 (B) 1001 (C) 1009 (D) 1010 (E) 2005

23. Five cards are lying on the table in the order 5, 1, 4, 3, 2. You must get the cards in the order 1, 2, 3, 4, 5. Per move, any two cards may be interchange. How many moves do you need at least?

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



24. Which of the following cubes has been folded from the plan on the right?

