

Ages 11–12 • 90 minutes • May 2026



Each problem has several answer choices. Choose one correct answer and write it on the answer sheet.

Problem 1 (3 points). In the school's nature corner, two turtles, Toby and Greg, were weighed. Toby turned out to be 6 kg heavier than Greg, and Greg weighs three times less than Toby. How many kilograms does Greg weigh?

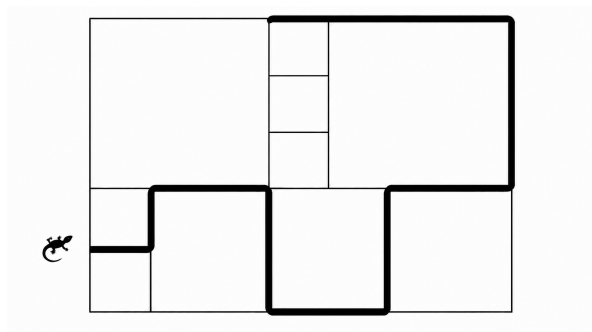
- (a) 2 (b) 3 (c) 4 (d) 5 (e) 6

Problem 2 (3 points). Mother Cat made five statements (a)–(e). Exactly one of them is false. Which one?

- (a) My son Oliver has three sisters
- (b) My son Oliver has two brothers
- (c) My daughter Bella has two sisters
- (d) My daughter Bella has two brothers
- (e) I have five children

Write only the final answer: a number, an expression, an example, or a short phrase, as required by the problem. You do not need to give a solution; only the answer is checked.

Problem 3 (5 points). A patio was paved with square tiles of three different sizes. The perimeter of each smallest tile is 80 cm. The picture shows the path of a lizard crawling along the tiles. What is the length of the lizard's path?



Problem 4 (5 points). There were 8 cards on a table, numbered from 1 to 8. Alice took two of the cards. After that, Polly divided the remaining 6 cards into two groups of three cards each, so that the sum of the numbers in one group was 7, and the sum in the other group was 21. Which two cards did Alice take?

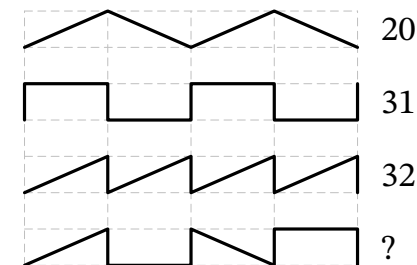
Problem 5 (5 points). An expedition leader and five expedition members are standing on one bank of a river. The members are Alice, Ben, Carl, Diana, and Emily.

There is a boat by the bank. It can carry the leader and at most two members. Only the leader can row the boat. It is known that any two members who stand next to each other in the list above cannot be left on the same bank without the leader: they will immediately start arguing. Find a way for the leader to take all the members to the other bank so that no argument ever starts.

As your answer, state which members the leader takes with him on the last crossing.

Write a complete solution: your reasoning, explanations, and a proof where needed. Both the final answer and the logic of your solution will be checked.

Problem 6 (7 points).



Emma divided a sheet of paper into identical rectangles and drew 4 broken lines. The lengths of three of the lines are given in the picture. What is the length of the fourth line? Do not forget to justify your answer.

Problem 7 (7 points). Kevin has two cards. Each card has one number written on each side. One side of one card has the number 7, and one side of the other card has the number 10. By flipping the cards and adding the two numbers that face up, Kevin can get four different sums: 11, 12, 16, and 17. What numbers could be written on the reverse sides of the cards? List all possible cases and prove that there are no others.