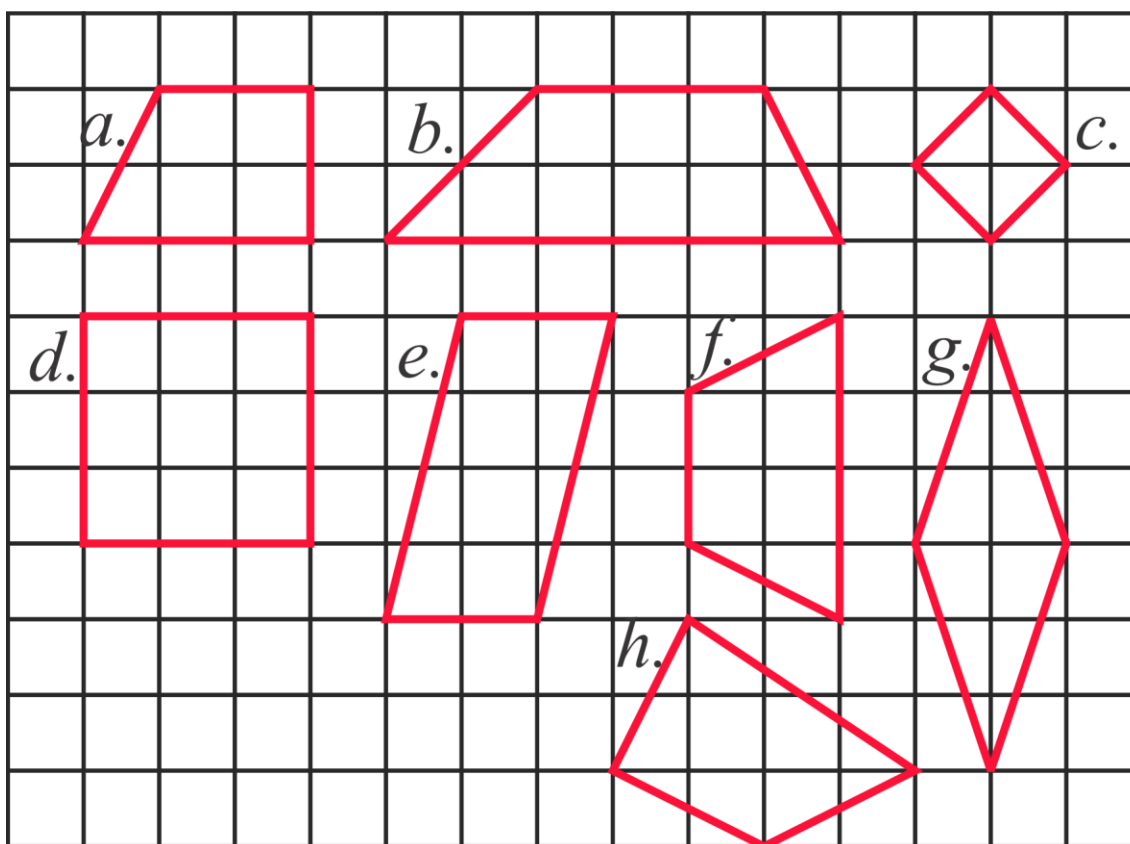
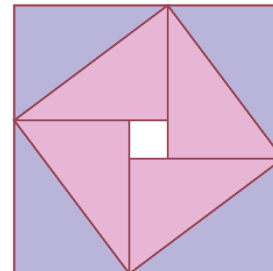


1. Evaluate:

$$\left(1 - \frac{1}{4}\right) \cdot \left(1 - \frac{1}{9}\right) \left(1 - \frac{1}{16}\right) \cdot \dots \cdot \left(1 - \frac{1}{100}\right);$$

2. A large square consists of four identical rectangles and a small square. The area of the large square is 49 cm^2 and the length of the diagonal AB of one of the rectangles is 5 cm. What is the area of the small square?
3. Find the area of polygons if the area of a grid cell is 1 cm^2 .



4. Four doughnuts cost 6 dollars more than one doughnut. What is the cost of one doughnut?
5. Evaluate. (Try not to use paper to do your calculations, do mental math and write only the resulting answers for each step). Answer is 10.

$$(12 - 8.4) : 0.09 \cdot 0.7 - 0.3 \cdot (0.6 + 3.12) : (14.18 - 7.98) : 0.01$$

6. Find all possible solutions to the problems:

- a. The sum of the digits of a 2-digit number is 12 and its product is 35. What is the number?
- b. The sum of the digits of a 2-digit number is 11 and its product is 24. What is the number?
- c. The sum and the product of the digits of a 3-digit number is 6. What is the number?
- d. The sum of the digits of a 4-digit number is 2 and its product is 0. What is the number?

7. What should the natural numbers a and b be so that the value of the expression $5a + 3b$ is:

- a. a multiple of 3;
- b. a multiple of 5;
- c. a multiple of 15,
- d. not a multiple of 3;
- e. not a multiple of 5.

