1. Three people enter the bus at the starting stop. At the second stop one passenger gets off and five people board. At the third stop two people will get off and four will board. At the fourth no one will go out, but ten will board. At the fifth stop two people leave and seven people enter. How many passengers at most can get out of the bus on the sixth stop?

2. What fraction of a circle does the short hand turn in 40 minutes?

3. Organizers of Czech maths contest once ate a salad. They know that the ingredients in it are in the ratio of lettuce : cheese = 3: 2, cheese : onion = 5: 6, onion : tomato = 3: 2, tomato : peas = 4: 7. How much peas are contained in the salad, if they used 150 g of lettuce?

4. Solve the following sudoku: Enter numbers 1 to 4 in the grid to make sure that each row, the column and the highlighted 2 × 2 square contains each number once.

	3	1	
4			
		1	
	4	3	

5. Four students, Kevin, Liam, Madison, and Natalie, took an exam. We know that their scores were 2, 12, 86, and 6 in some order. We also know that
   - Kevin's score was pampam than Madison's score,
   - Madison's score was pampam than Liam's score,
   - Natalie's score was pampam than Liam's score,
   - Kevin's score was pampam than Natalie's score.
   where pampam means either "greater" or "smaller" (the same meaning in all four cases). What was the sum of Madison's and Natalie's scores?

6. Jack and John are standing in a square and counting houses around. However, each starts counting (clockwise) at a different house, so Jack's house no. 4 is John's 16, and Jack's 12 is John's 7. How many houses are there in the square?

7. The picture shows a decagon with all sides meeting at right angle. Lengths of some of the sides (shown as dashed in the picture) are known and given in cm. What is the perimeter of the decagon in cm?
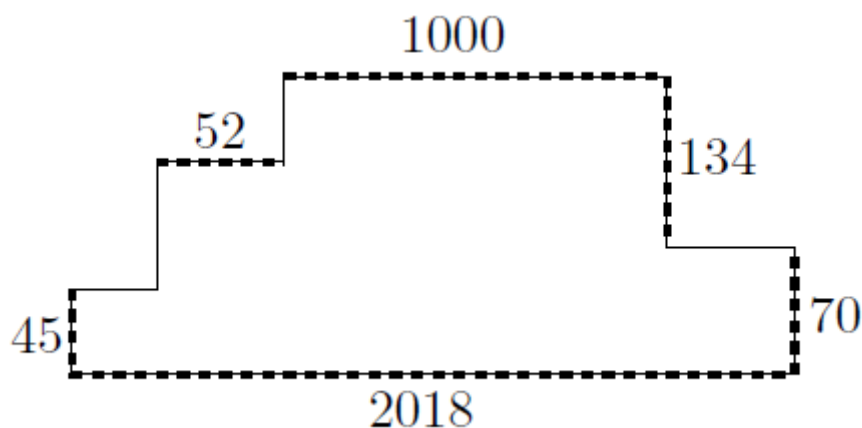
8. Peter has a rectangle divided into four smaller rectangles with integer (numbers with no komma) lengths in cm. The areas (in cm²) are shown in the figure. What is the perimeter of Peter's rectangle?

18	15
24	20

9. Grandmother Andrea produces juice from raspberries and blueberries from her garden where she collected 70 kg of this fruit. For one liter of raspberry juice she needs 3 kg of raspberries and one liter of blueberry juice requires 4 kg of blueberries. How many kilograms of blueberries she harvested if she produced 21 ℓ of juice?

10. Two circles, each 20 cm in diameter, intersect at two points 12 cm apart. What's the distance between their centres?

11. If g is parallel to h and the angles at A and C are 105° and 145° as indicated in the picture, what is the measure of angle CBA?