

(Print your name)

Example RT#003
Recruitment Test – Maths and Logic

Allotted Time: 60 minutes

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| Please read the following instructions very carefully before starting the test. | |
| 1. | Print your name at the top of this page. |
| 2. | Answer all questions in this test , and do not use any red ink. |
| 3. | Do not remove the staples; if you need more space for calculations or notes, use the back of the preceding page. |
| 4. | For the correct answer you will receive the number of points indicated in the shaded boxes to the right of each question. |
| 5. | Please note that a comma is used as the decimal separator in all decimal numbers and a point is used as a thousand separators. |
| 6. | The points are distributed according to the time you should need for every exercise. |

NO CALCULATORS	NO MOBILE PHONES	NO BOOKS OR NOTES
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Page	2	3	4	Total
Questions	1 - 5	6 - 10	11 – 15	1 – 15
Max no. of points	21	19	20	60
Points received				

1. Transform **the percentages into** fractions, cancelling **all common factors**.

(2 pts. for each correct answer = 6 pts.)

a) $0,085\% =$

b) $175\% =$

c) $1,25\% =$

2. Calculate the expression and show the result as a **decimal**.

(2 pts. for each correct answer = 4 pts.)

a) $\frac{8}{150} \div \left(\frac{7}{18} \cdot \frac{24}{35} \right) =$

b) $\frac{0,4 \cdot 5,2}{9,24 - 3} =$

3. **Perform** the operations and give the result as a **fraction**.

(2 pts. for each correct answer = 4 pts.)

a) $\frac{1}{5} - \left(-\frac{1}{12} + \frac{4}{3} \right) =$

b) $3,6 + \frac{6 + \frac{1}{2}}{2,6} =$

4. The numbers in the following schemata are filled in according to a certain system.

Complete the schema by filling in the shaded fields.

(2 pts. for each correct answer = 4 pts.)

60	20	40
72	24	48
87	29	
42		28

5. John is 3 years older than Anna. **How old are they** if the sum of their ages is 75?

(3 pts. for the answer = 3 pts.)

Sum of points on page #2



6. **How many pets** do I keep in my house? All pets are dogs except of two, all are cats except of two, and all are parrots except of two.

(4 pts. for the answer = 4 pts.)

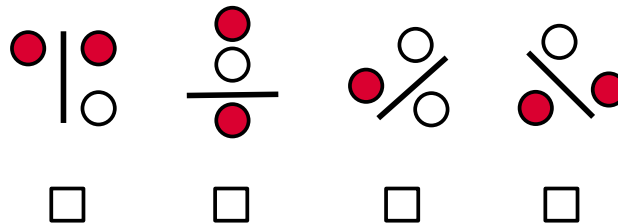
7. **Calculate the values** due to the given percentages.

(2 pts. for each correct answer = 4 pts.)

- a) 18% of 4 million EUR →
b) 2,1% of 1.600 km →

8. Which figure does not fit into this picture? **Tick** the corresponding box. [8.83]

(3 pts. for the correct answer = 3 pts.)



9. A green painted wooden cube of 20 cm edge length will be cut into dice with each getting the edge length of 10 cm.

(2 pts. for each correct answer = 4 pts.)

- a) How many dice will be generated?
b) How many square areas have to be painted such that the new dice are again completely green?

10. You planted a tree in your garden which is 250 cm high. We assume that the tree is growing 8% annually. **How high will the tree** be after ...

(2 pts. for each correct answer = 4 pts.)

- a) 1 year
b) 3 months

Sum of points on page #3



11. Calculate the **final price** of the dress which was originally priced out with 120 EUR.

The price was reduced once by 15% and for a special sale another times by 10%.

(4 pts. for the correct answer = 4 pts.)

12. Complete the logical sequence of numbers. Tick the correct answer.

(2 pts. for each correct answer = 4 pts.)

a) 3; 5; 9; 17; 33; ___

55 60 65 54

b) 6; 7; ___ ; 12; 16

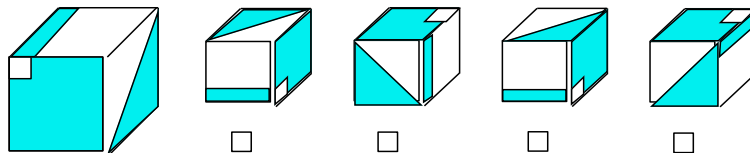
8 9 11 10

13. A cashier working alone serves 20 clients in 1 hour. A second cashier serves the same number of persons in 40 minutes. **What time** will they need serving the 20 clients if they work both?

(4 pts. for the correct answer = 4 pts.)

14. One of the presented small dice is identical with the given big cube. Find it by comparing the visible sides and tick it.

(4 pts. for the correct answer = 4 pts.)



15. Find the **solution** of the following system of equations.

(4 pts. for the correct answer = 4 pts.)

$$-2x + 3y = 14 \quad (1)$$

$$5x - 4y = -21 \quad (2)$$

Sum of points on page #4

