


УТВЕРЖДАЮ

Председатель приемной комиссии  
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Задания (вопросы) для проведения  
собеседования на английском языке по  
учебному предмету «Математика» для  
получения общего высшего и специального  
высшего образования, 2025 год

### ПОЯСНИТЕЛЬНАЯ ЗАПИСКА

Вступительные испытания проводятся в форме собеседования, устанавливающего уровень владения кандидатами языком, на котором осуществляется образовательный процесс, в целях определения возможности освоения ими содержания образовательной программы высшего (общего или специального) образования.

Задания (вопросы) для проведения собеседования составлены на основании программы вступительных испытаний по учебному предмету «Математика» предназначенной для лиц, поступающих в учреждения высшего образования для получения общего высшего и специального высшего образования в Республики Беларусь, утвержденной приказом Министра образования Республики Беларусь 10.10.2024 № 451.

### ЗАДАНИЯ (вопросы) для проведения собеседования

1. What is your favorite math topic and why?
2. What is 25% of 200?
3. Convert 0.5 to a fraction.
4. Which number is greater: 0.7 or  $\frac{3}{4}$ ? Explain how you know.
5. Add these two fractions:  $\frac{2}{5} + \frac{3}{10}$ .
6. Solve the equation:  $3x + 5 = 20$ .
7. What is the area of a rectangle with sides 5 cm and 7 cm?
8. What do you call a triangle that has all equal sides?
9. You have \$50. You buy 3 notebooks for \$8 each. How much money will you have left?
10. I am a number. I am greater than 20 and less than 30. I am divisible by 3. What number am I?
11. What is the least common multiple (LCM) of 6 and 8?
12. Divide 144 by 12 and then subtract 3. What is the result?
13. A number is multiplied by 4 and the result is 64. What is the number?
14. Which number is both a multiple of 3 and 5 between 30 and 50?
15. How many degrees are there in the sum of all angles in a pentagon?

16. A triangle has angles measuring  $35^\circ$  and  $65^\circ$ . What is the measure of the third angle?
17. What is the perimeter of a rectangle with sides 7 cm and 12 cm?
18. The radius of a circle is 4 cm. What is its diameter?
19. Solve for  $x$ :  $3x + 5 = 20$
20. If a pizza is divided into 8 equal slices and you eat 3, what fraction of the pizza is left?
21. How often do you use math outside of school?
22. What does it mean when we say "x is a variable"?
23. Can you multiply 12 by 8 in your head?
24. Which is larger:  $\frac{3}{4}$  or  $\frac{5}{8}$ ?
25. If  $y = 2x$ , what is  $y$  when  $x = 4$ ?
26. What is the value of  $(3^2 \times 2) + 4$ ?
27. Solve for  $x$ :  $2(x - 3) = 4x - 10$
28. What is the sum of the angles in a triangle?
29. If a train travels 60 kilometers in one hour, how far does it travel in 3.5 hours?
30. What is the square of 15?
31. What is the next number in the sequence: 2, 6, 12, 20, \_\_\_?
32. If  $y = 2x + 1$ , what is  $y$  when  $x = 4$ ?
33. Factor the expression:  $x^2 + 5x + 6$
34. The sum of two numbers is 25. One number is 3 times the other. What are the numbers?
35. A train travels 60 km in 1.5 hours. What is its speed in km/h?
36. You have 5 red balls, 3 blue balls, and 2 green balls. What is the probability of picking a blue ball at random?
37. Name a 3D shape that has 6 faces, 12 edges, and 8 vertices.
38. A shop gives 10% discount on a \$50 item. How much do you pay?
39. Tom is twice as old as Anna. If Anna is 12 years old, how old will Tom be in 5 years?
40. In a right triangle, one leg is 6 cm and the other is 8 cm. What is the hypotenuse?