

1. Write a program that counts the sum, difference, product, and modulo of two integers
2. Write a program that calculates the product and quotient of real numbers given from the keyboard by the user.
3. Write a program to calculate the volume and total area of a cuboid.
4. Write a program that calculates the density value ($f(x)$) of the normal distribution at point x , for given parameters μ and σ :

$$f(x) = \frac{1}{\sigma\sqrt{2\pi}} e^{-\frac{(x-\mu)^2}{2\sigma^2}}$$

5. Write a program that determines the largest possible number correctly represented by the types short, int and float, for float also the smallest possible number greater than zero.
6. Write a program to check whether a number given from the keyboard is even or odd.
7. Write a program that calculates, depending on the user's choice, the sum or difference of two numbers.
8. Write a program to check for two numbers how the percentage of the larger number is the smaller one. E.g. $a = 2$, $b = 4$ result: the number a is 50% of the number b .
9. Write a program that calculates, depending on the user's choice, the area of a circle, triangle or square for the given required parameters.
10. Verify that the given point with x and y coordinates given from the keyboard lies between the functions $y = \log(x) + 10$, $y = 1.5^x$, $y = \exp(x)$.

11. Write a program that solves a system of equations with two unknowns using the determinant method.

Description of the algorithm: <https://philschatz.com/algebra-intermediate-book/contents/m63334.html>