



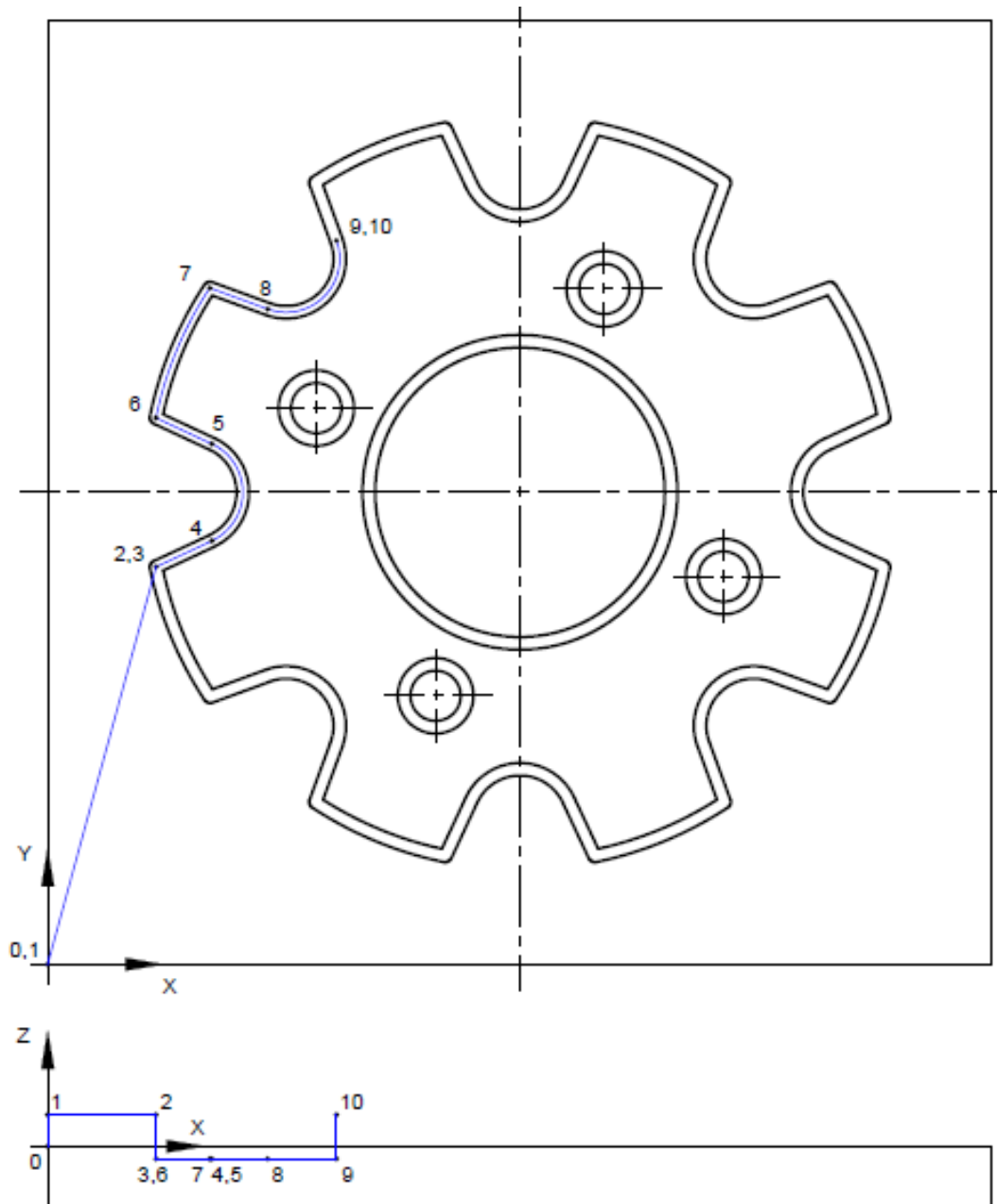
Field of education:
Mechanical engineering

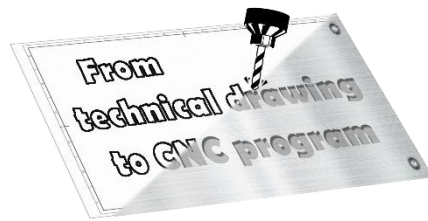
Professional qualification:
CNC operator

Exercise:
**Programming of CNC machine
(solution)**

Variant:
Task 48 – Sprocket 3.1.

Solution:





Required written code that should be inserted into the control unit:

```
G0 Z5  
X17,202 Y63,151  
G1 Z-2  
X26,092 Y67,296  
G3 Y82,704 R8,5  
G1 X17,202 Y86,849  
G2 X25,752 Y107,491 R59  
G1 X34,97 Y104,136  
G3 X45,864 Y115,03 R8,5  
G1 Z5  
M30
```

Explanation of the G-code:

```
%Setting the coordinate system x=0, y=0, z=0; point 0  
G0 Z5 %Lifting of tool; point 1  
X17,202 Y63,151 %Positioning at the starting point; point 2  
G1 Z-2 %Tool entry into material; point 3  
X26,092 Y67,296 %Straight milling; point 4  
G3 Y82,704 R8,5 %Radial milling; point 5  
G1 X17,202 Y86,849 %Straight milling; point 6  
G2 X25,752 Y107,491 R59 %Radial milling; point 7  
G1 X34,97 Y104,136 %Straight milling; point 8  
G3 X45,864 Y115,03 R8,5 %Radial milling; point 9  
G1 Z5 %Lifting of tool; point 10  
M30 %End of program
```