



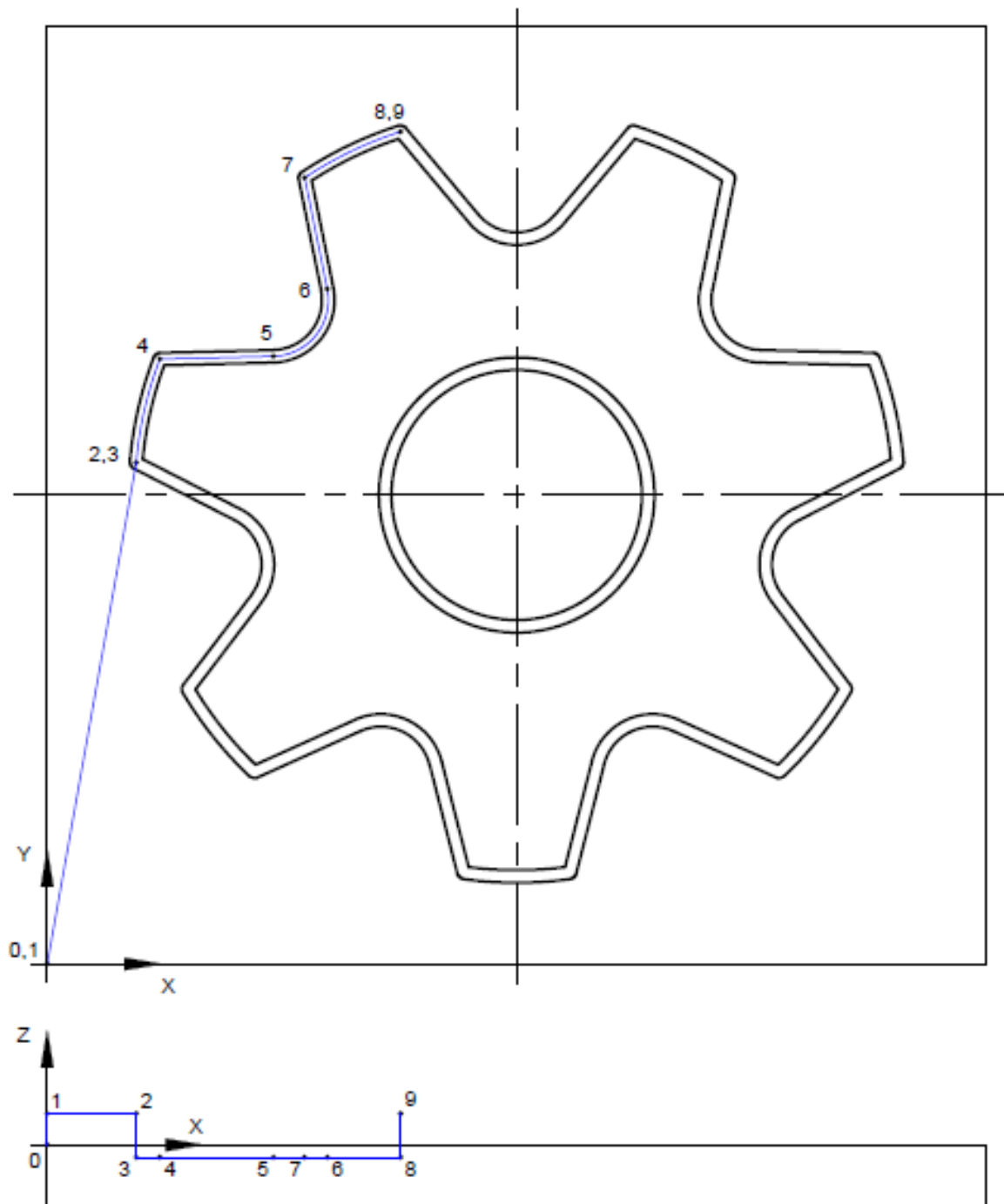
Field of education:
Mechanical engineering

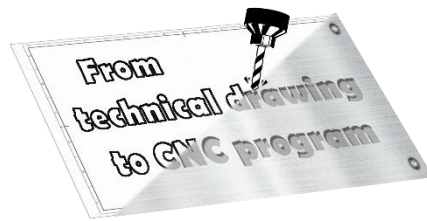
Professional qualification:
CNC operator

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

Variant:
Task 43 – Sprocket 2.1.

Solution:





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

G0 Z5
X14,218 Y80,158
G1 Z-2
G2 X18 Y96,725 R61
G1 X36,133 Y97,177
G3 X44,73 Y107,958 R9
G1 X41,136 Y125,737
G2 X56,446 Y133,11 R61
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
X14,218 Y80,158 %Positioning at the starting point; point 2
G1 Z-2 %Tool entry into material; point 3
G2 X18 Y96,725 R61 %Radial milling; point 4
G1 X36,133 Y97,177 %Straight milling; point 5
G3 X44,73 Y107,958 R9 %Radial milling; point 6
G1 X41,136 Y125,737 %Straight milling; point 7
G2 X56,446 Y133,11 R61 %Radial milling; point 8
G1 Z5 %Lifting of tool; point 9
M30 %End of program