

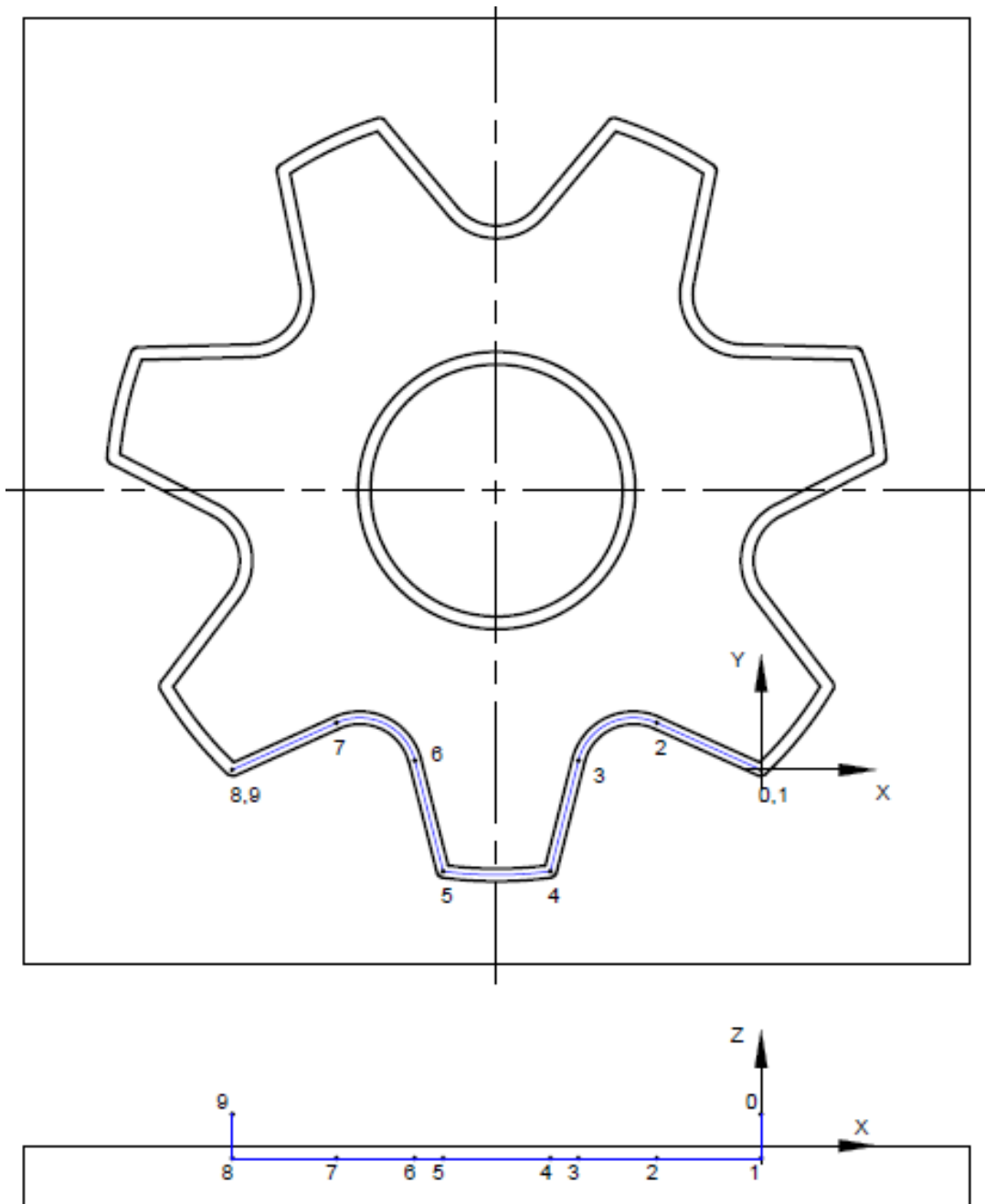
Field of education:
Mechanical engineering

Professional qualification:
CNC operator

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

Variant:
Task 46 – Sprocket 2.4.

Solution:



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

G1 Z-2

X-16,533 Y7,46

G3 X-28,957 Y1,477 R9

G1 X-33,433 Y-16,1

G2 X-50,426 R61

G1 X-54,902 Y1,477

G3 X-67,325 Y7,46 R9

G1 X-83,858 Y0

Z5

M30

Explanation of the G-code:

%Setting the coordinate system x=0, y=0, z=5; point 0

G1 Z-2 %Tool entry into material; point 1

X-16,533 Y7,46 %Straight milling; point 2

G3 X-28,957 Y1,477 R9 %Radial milling; point 3

G1 X-33,433 Y-16,1 %Straight milling; point 4

G2 X-50,426 R61 %Radial milling; point 5

G1 X-54,902 Y1,477 %Straight milling; point 6

G3 X-67,325 Y7,46 R9 %Radial milling; point 7

G1 X-83,858 Y0 %Straight milling; point 8

Z5 %Lifting of tool; point 9

M30 %End of program