

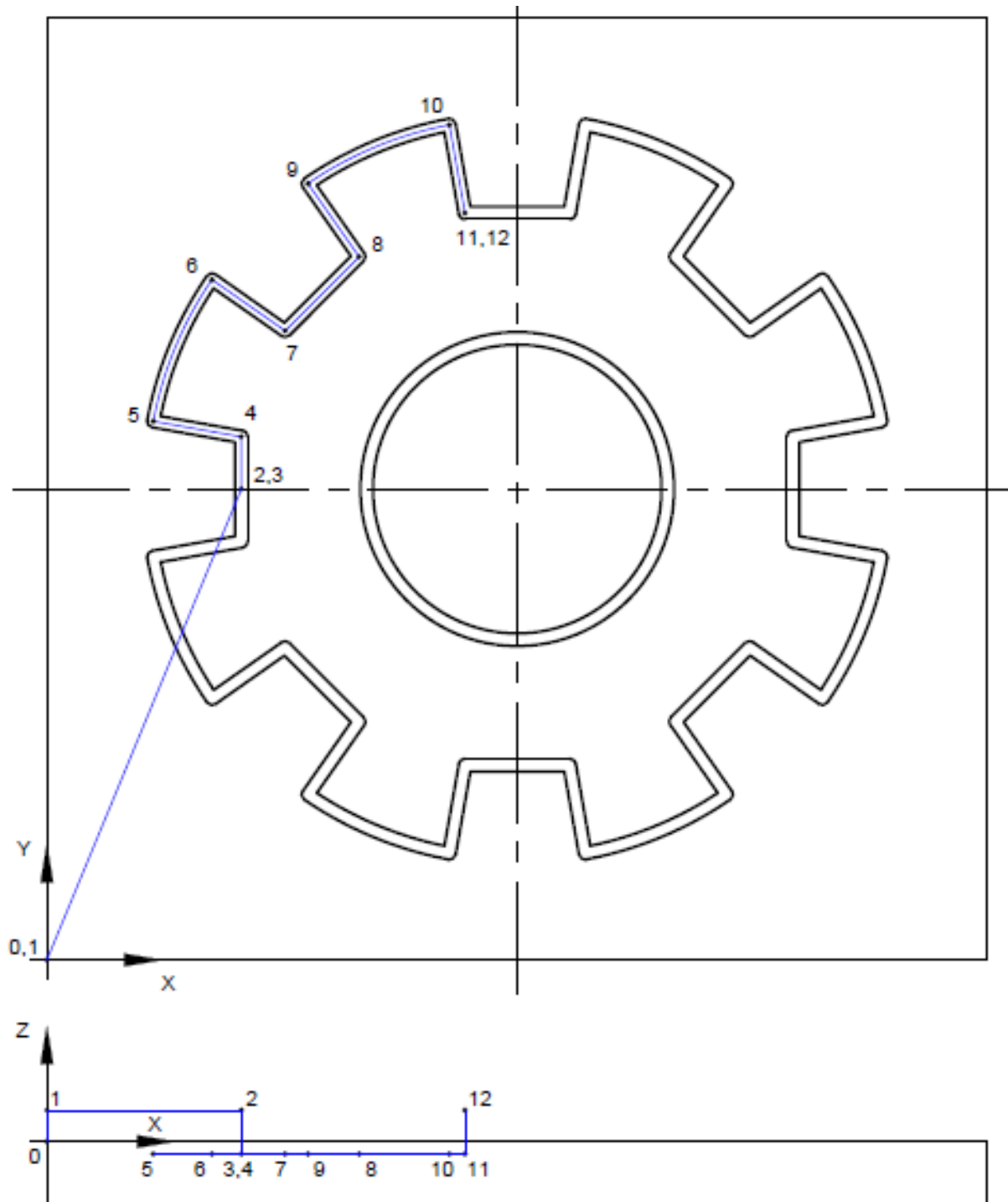
Field of education:
Mechanical engineering

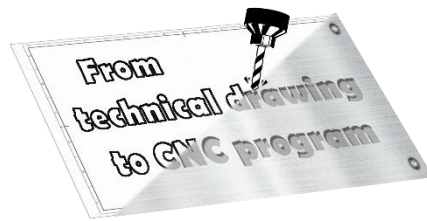
Professional qualification:
CNC operator

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

Variant:
Task 54 – Sprocket 4.1.

Solution:





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

G0 Z5
X31 Y75
G1 Z-2
Y83,339
X16,998 Y85,808
G2 X26,344 Y108,371 R59
G1 X37,991 Y100,216
X49,784 Y112,009
X41,629 Y123,656
G2 X64,192 Y133,002 R59
G1 X66,661 Y119
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

X31 Y75 %Positioning at the starting point; point 2

G1 Z-2 %Tool entry into material; point 3

Y83,339 %Straight milling; point 4

X16,998 Y85,808 %Straight milling; point 5

G2 X26,344 Y108,371 R59 %Radial milling; point 6

G1 X37,991 Y100,216 %Straight milling; point 7

X49,784 Y112,009 %Straight milling; point 8

X41,629 Y123,656 %Straight milling; point 9

G2 X64,192 Y133,002 R59 %Radial milling; point 10

G1 X66,661 Y119 %Straight milling; point 11

Z5 %Lifting of tool; point 12

M30 %End of program