



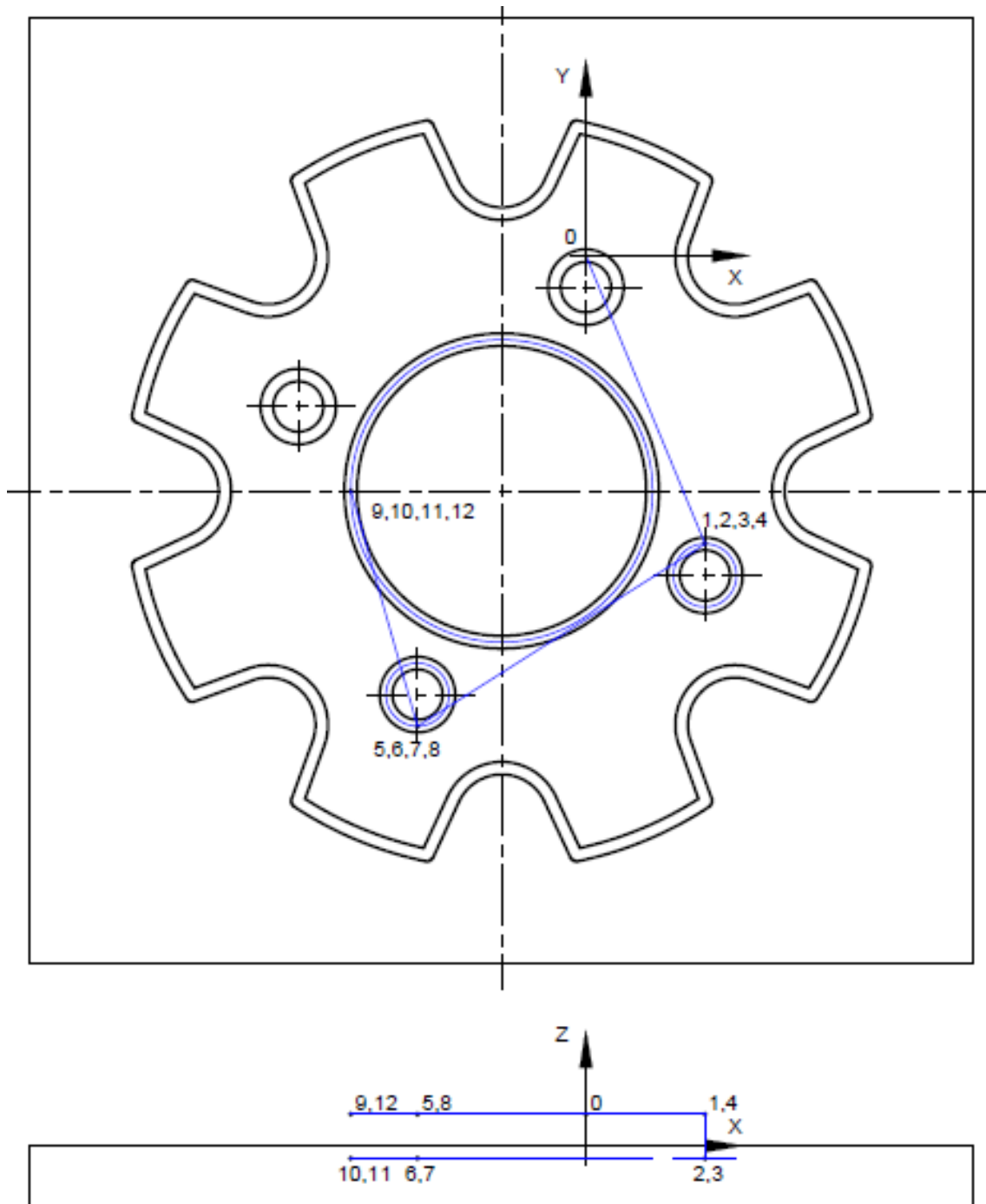
Field of education:
Mechanical engineering

Professional qualification:
CNC operator

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

Variant:
Task 53 – Sprocket 3.6.

Solution:



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

G0 X18,942 Y-45,73

G1 Z-2

G2 X18,942 Y-45,73 I0 J-5

G1 Z5

G0 X-26,788 Y-74,672

G1 Z-2

G3 X-26,788 Y-74,672 I0 J5

G1 Z5

G0 X-37,394 Y-47,336

G1 Z-2

G3 X-37,394 Y-47,336 I24 J0

G1 Z5

M30

Explanation of the G-code:

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

G0 X18,942 Y-45,73 %Positioning at the starting point; point 1

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

G2 X18,942 Y-45,73 I0 J-5 %Circle milling; point 3

G1 Z5 %Lifting of tool; point 4

G0 X-26,788 Y-74,672 %Positioning; point 5

G1 Z-2 %Tool entry into material; point 6

G3 X-26,788 Y-74,672 I0 J5 %Circle milling; point 7

G1 Z5 %Lifting of tool; point 8

G0 X-37,394 Y-47,336 %Positioning; point 9

G1 Z-2 %Tool entry into material; point 10

G3 X-37,394 Y-47,336 I24 J0 %Circle milling; point 11

G1 Z5 %Lifting of tool; point 12

M30 %End of program