Field of education:
Mechanical engineering

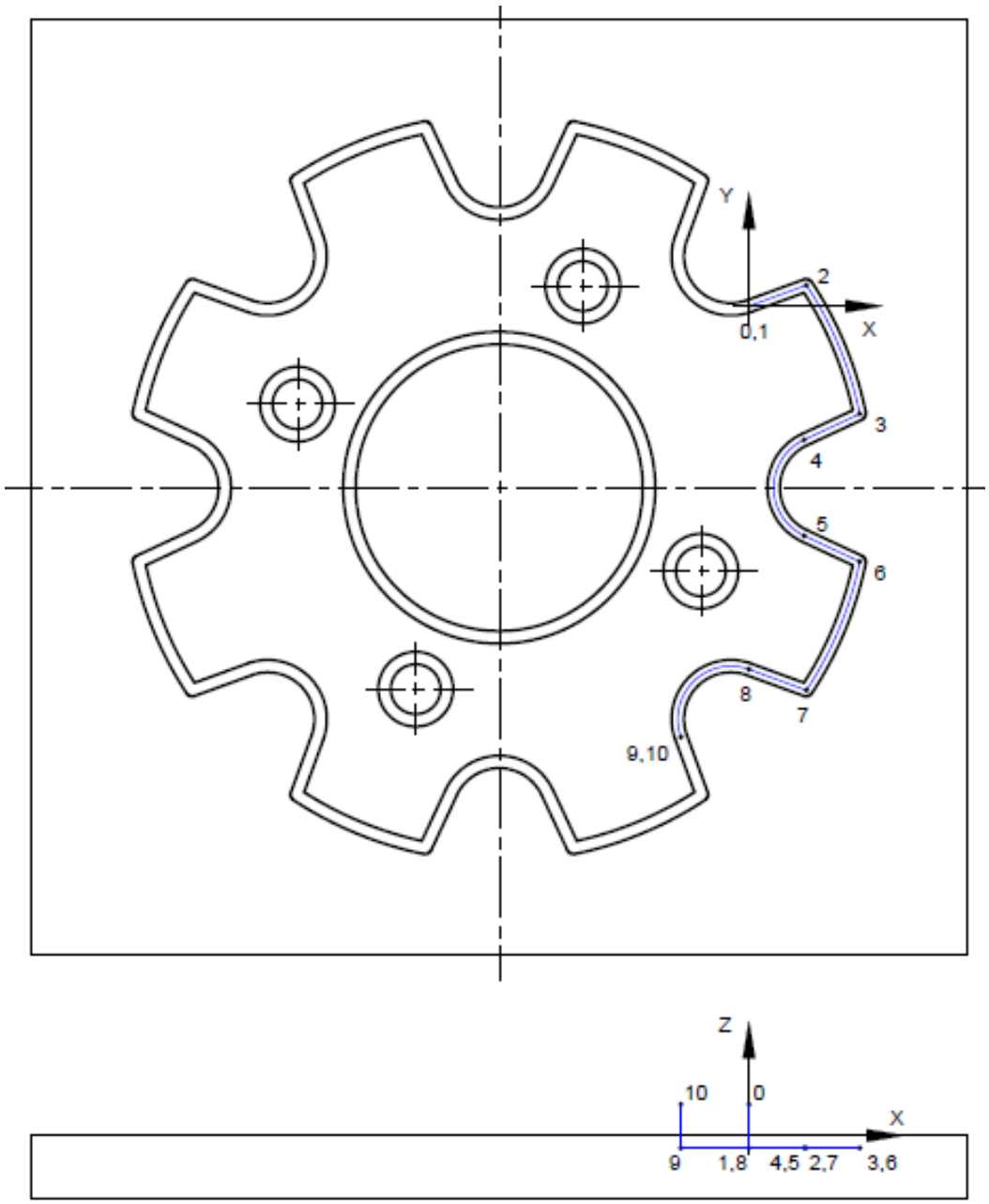
Professional qualification:
CNC operator

Exercise:
Programming of CNC machine (solution)

Variant:
Task 50 – Sprocket 3.3.

Strukovna škola Đurđevac | Dr. Ivana Kranjčeva 5, 48350 Đurđevac
Tel.: +385 48 812 223 | E-mail: ured@ss-strukovna-djurdjevac.skole.hr
Web: ss-strukovna-djurdjevac.skole.hr

Solution:



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

```
G1 Z-2
X9,218 Y3,355
G2 X17,768 Y-17,287 R59
G1 X8,877 Y-21,432
G3 Y-36,839 R8,5
G1 X17,768 Y-40,985
G2 X9,218 Y-61,626 R59
G1 X0 Y-58,271
G3 X-10,895 Y-69,166 R8,5
G1 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

X9,218 Y3,355 %Straight milling; point 2

G2 X17,768 Y-17,287 R59 %Radial milling; point 3

G1 X8,877 Y-21,432 %Straight milling; point 4

G3 Y-36,839 R8,5 %Radial milling; point 5

G1 X17,768 Y-40,985 %Straight milling; point 6

G2 X9,218 Y-61,626 R59 %Radial milling; point 7

G1 X0 Y-58,271 %Straight milling; point 8

G3 X-10,895 Y-69,166 R8,5 %Radial milling; point 9

G1 Z5 %Lifting of tool; point 10

M30 %End of program