

## Verifying Programs Q+A

➔ Answers to questions:

1. Syntax and Logical - control will detect syntax errors but not logical errors
2. **Preventive** measures (proactive) and **Corrective** measures (reactive)
3. **G00 X10.0** should be **G00 X10.0**
4. Negative/positive values, trigonometry errors, rounding errors, wrong calculator input,
5. Get organized - Set procedures - Be consistent ... Check your own work
6. Press the manual coolant switch, available on most CNC machines
7. Optionally, on the screen simulation, graphic simulator software, or a paper plotter (generally not used)
8. The program has several errors - Tool call missing, absolute mode and work offset missing, missing decimal point, letter O instead of digit 0, tool length offset missing, dwell missing in G82 cycle, incremental mode missing for cycle repetition. In addition, if G90 is added at the end of the program (recommended), then the last three blocks would also change slightly.

## (PROGRAM WITH ERRORS)

```

N1 G21
N2 G17 G40 G80 M06
N3 G00 X120.0 Y50 S1550 M03
N4 G43 Z10.0 M08
N5 G82 R2.0 Z-15.65 F150.0
N6 X10.0 Y15.0 L5
N7 G80 Z10.0 M09
N8 G28 Z0 M05
N9 M30
%
```

## (CORRECT PROGRAM)

```

N1 G21
N2 T01
N3 G17 G40 G80 M06
N4 G90 G54 G00 X120.0 Y50.0 S1550 M03
N5 G43 Z10.0 H01 M08
N6 G82 R2.0 Z-15.65 P200 F150.0
N7 G91 X10.0 Y15.0 L5
N8 G80 Z10.0 M09
N9 G28 Z0 M05
N10 M30
%
```