

# 2 Tests comprehension of motion types

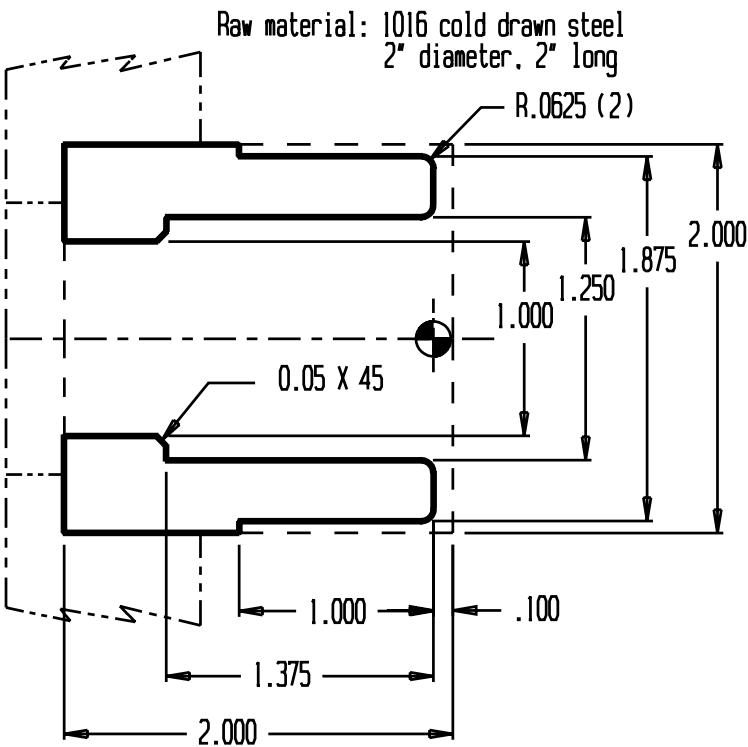
Name: \_\_\_\_\_

Date: \_\_\_\_\_

Score (100 possible):

**Instructions:** *First*, study the print and process to gain an understanding of what the program will be doing. *Second*, study the tool paths and fill in the coordinate sheet for tool positions needed by the program. Again, all clearance positions are intended to be 0.1 inch away from surfaces. *Third*, fill in the blanks in the program with the appropriate G codes, spindle speeds, feedrates, and axis positions. This exercise stresses the same skills as programming activity number one.

Print:



Coordinate Sheet:

Point	X	Z
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
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26		

Process:

Seq.	Operation description	Tool	Station	Speed	Feedrate
1	Rough face (leave 0.005 for finishing)	80 degree diamond	1	400 sfm	0.012 ipr
2	Drill 7/8 diameter hole	7/8 hss twist drill	2	350 rpm	0.008 ipr
3	Rough bore (leave 0.06 on dia, 0.005 on face)	3/4 rough boring bar	3	350 sfm	0.007 ipr
4	Finish bore	3/4 finish boring bar	4	400 sfm	0.005 ipr
5	Finish face and turn	55 degree diamond	5	450 sfm	0.006 ipr