

Name _____

Hour/ Day _____

Lathe Project 1 – Step Exercise

Material: 1 pc, 1-1/8" DIA. 7-3/4" L CRS

Procedure:

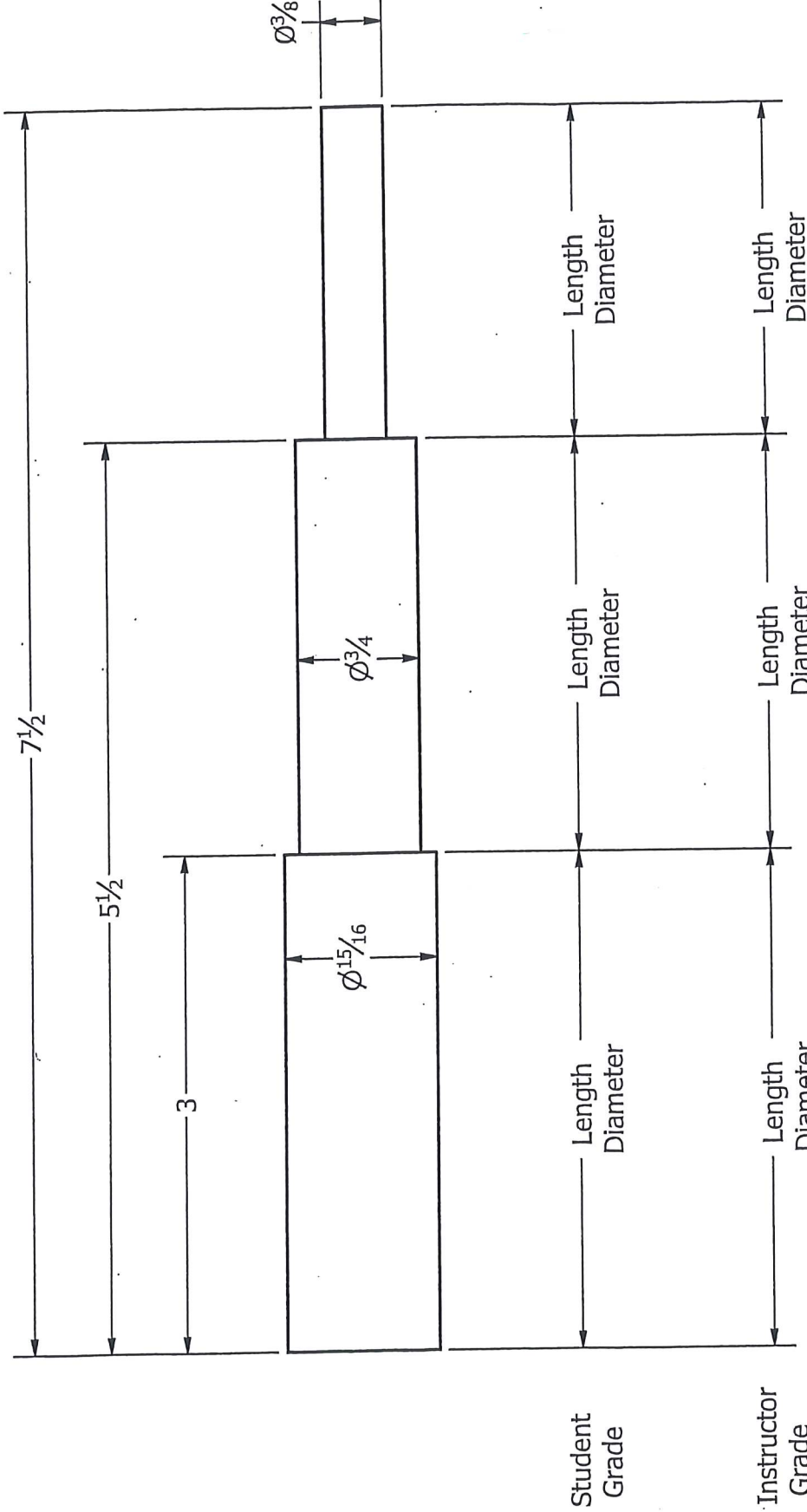
1. Cut stock to rough length on Horizontal Bandsaw.
2. Mount work in 3-Jaw chuck.
3. Place #4 center drill in tailstock chuck.
4. Center drill to the proper depth using the highest RPM setting.
5. Reset RPM to approximately 500 with a feed rate of .010"-.015" / rev.
6. Mount cutting tool in the tool holder and face one end smooth/square. (Center drill deeper if needed.)
7. Repeat steps 4-6 on the other end and face to a length of 7-1/2". STAMP initials on what is to be the 15/16" DIA. End
8. Mount work between centers using a lathe dog. (Be sure to check for taper first.)
9. Turn 15/16" D. roughly half the length of the shaft.
10. Remove stock, flip piece end for end, lay out start point of 3/4" D.
11. Turn 3/4" D. and lay out start of 3/8" D.
12. Continue this procedure for all steps.
13. Work carefully checking each step with a micrometer
14. Deburr any sharp edges with a file.
15. Grade your own work on the evaluation sheet and be sure to total your score.
16. Tape project to the evaluation sheet and turn in for instructor to grade.

1

2

3

Step Exercise



Diameter Grading Scale

.000"-.003"	.004"-.007"	.008"-.010"	.011"-.013"	.014"-.016"	+.017"
15 pts	12 pts	10 pts	8 pts	6 pts	4 pts

Length Grading Scale: 1 Point for every .005" off, up to 5 points / Step

Name _____

Step Exercise Evaluation

<u>Item</u>	<u>Points</u>	<u>Student Grade</u>	<u>Instructor Grade</u>
Overall Length of 7 1/2 "	10		
Length of Steps (5 points Each)	15		
Outside Diameters (within .003") 15 points each	45		
Finish	10		
Correct Center Drilling	5		
Initials On End	5		
<u>Totals</u>			

90