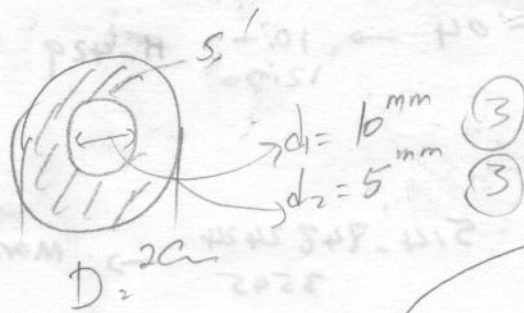
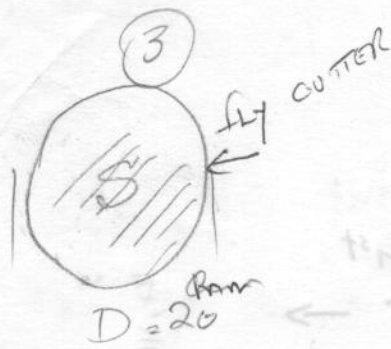


$$\frac{\pi}{4} (D^2 - d^2) = \frac{\pi}{4} (20^2 - 5^2)$$

$$D^2 - d^2 = 4$$

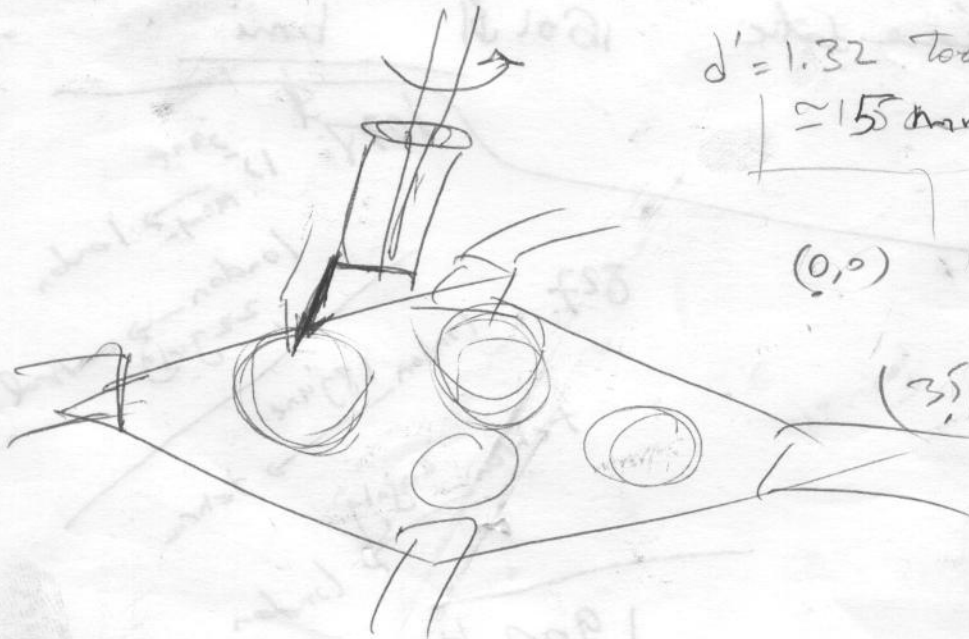
$$(20^2 - d^2) = 4$$

$$d = 1.32 \text{ Too Small}$$

$$\approx 15 \text{ mm}$$

$$(0,0) \quad (45,0)$$

$$(35,70)$$



Cut 50x4 / diam tube

DRAWING #
NAME OF OPERATOR: Hesan Naseer
COURSE: Research Project

TOOLS :	OUT	IN	EIR APPROVAL	
				STAFF ASSIGNED
				MAT. RECEIVED

Operation #	Name Of Operation	Machine	Cutting Tool	Spindle Speed (RPM)	Comments	Risks / Hazards
1	DRILL	MILL	5, 10, 15 MM	1200 1000	SS 10 PARTS	
2	CUT DISK	FL	BORING TOOL	600		