

PROBLEM T2

10 Points total

A			1.5		
	Correctly identifies critical conditions	1.0			
	Does algebra correctly (has correct expression in terms of R,n)	0.5			
Partial soln	Critical condition only for 1 reflections	0.3			
	Critical condition only for 2 and 3 reflections	0.6			
	Critical condition only for 2 and 3 and 4 reflections	1.0			
B1			2.0		
	Correctly understand angles of reflection	0.3			
	Correctly understands relation to geometry of container center line	0.5			
	Correctly understands tangential condition	0.2			
	Use triangles in image to compute,	0.5			
	Do trigonometric correctly	0.5			
B2			1.5		
	Correctly computes P0	0.3			
	Understands flux flow	0.7			
	Correctly computes P	0.3			
	Expressed correctly in terms of required data	0.2			
B3			0.5		
	Utilize previous result correctly to compute theta_max	0.3			
	Calculate a for specific case	0.15			
	correct units	0.05			
C1			0.5		
	Slope correct	0.3			
	Intercept correct	0.2			
C2			2.0		
	Do second slope correctly with small increment in angle	0.2			
	Correctly expand slope to first order	0.8			

[illegible]