Cox's Timepiece (10 points)

Part A - Pulling on a submerged tube

A.1 (0.2pt)

$P_w =$

$\vec{F} =$

A.2 (0.8pt)

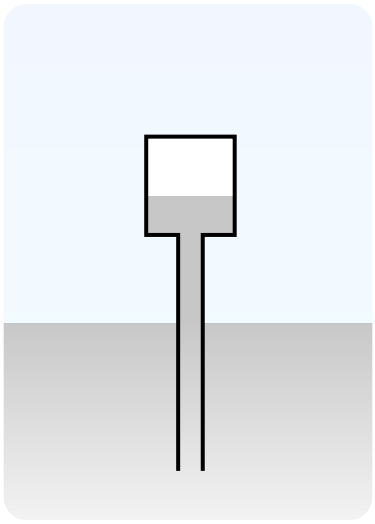
Experiment	Behaviour (A or B ?)	$h^\star$ (cm)	F_{max} (N)
1			
2			
3			

A.3 (0.3pt)

$\varepsilon =$ Numerical value: $\varepsilon =$

Part B - Two-part barometric tube

B.1 (0.3pt)



B.2 (1.4pt)

B.3 (0.3pt)

$\Delta m_{\text{add}} =$ Numerical value: $\Delta m_{\text{add}} =$

Part C - Cox's timepiece

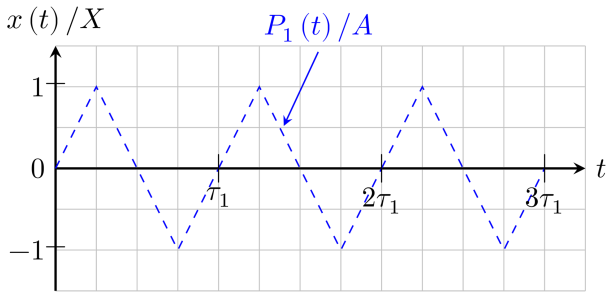
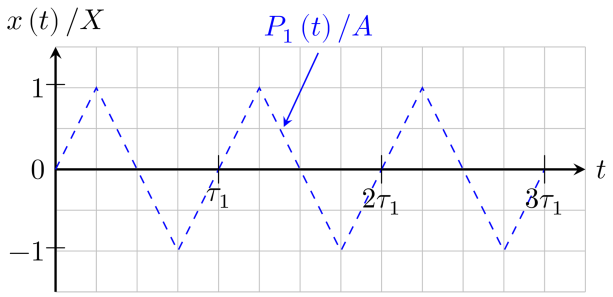
C.1 (1pt)

$\xi^\star =$

C.2 (1pt)

$\overrightarrow{T} =$

C.3 (2pt)

	Condition for observation	Graph of $x(t)/X$
Regime 1		
Regime 2		

C.4 (1pt)

$F_s^\star =$ $X^\star =$

$W^\star =$ Numerical value: $W^\star =$

C.5 (1.7pt)

$W_{pr}^\star =$

$\dfrac{W^\star}{W_{pr}^\star} =$