$\frac{dV}{dx} = -w$	$\frac{dM}{dx} = V$
$V = V_p - \int_{x_p}^x w dx$	$M = M_p + \int_{x_p}^{x} V dx$
$V_p^+ = V_p^- + \Delta V$	$M_p^+ = M_p^- + \Delta M$

$f \ge N\mu$	$T_{high} = T_{low}e^{\mu\beta}$
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$I_x = \int \tilde{y}^2 dA$	$I_{y} = \int \tilde{x}^{2} dA$	$J_o = \int \tilde{r}^2 dA = I_x + I_y$ $\tilde{r} = \sqrt{\tilde{x}^2 + \tilde{y}^2}$	$I_{xy} = \int \tilde{x}\tilde{y} dA$
$k_x = \sqrt{\frac{I_x}{A}}$	$k_{y} = \sqrt{\frac{I_{y}}{A}}$	$k_o = \sqrt{\frac{J_o}{A}}$	
$I_{x} = I_{x'} + d_{x}^{2}A$ $I_{x} > I_{x'}$	$I_y = I_{y'} + d_y^2 A$ $I_y > I_{y'}$	$I_o = I_{o'} + d^2 A$ $I_o > I_{o'}$	

$I_x = \int r_x^2 dm$ $= \int \tilde{y}^2 + \tilde{z}^2 dm$	$I_{y} = \int r_{y}^{2} dm$ $= \int \tilde{x}^{2} + \tilde{z}^{2} dm$	$I_z = \int r_z^2 dm$ $= \int \tilde{x}^2 + \tilde{y}^2 dm$
$k_x = \sqrt{rac{I_x}{m}}$	$k_y = \sqrt{rac{I_y}{m}}$	$k_{Z}=\sqrt{rac{I_{Z}}{m}}$
$I_x = I_{x'} + d_x^2 m$ $I_x > I_{x'}$	$I_{y} = I_{y'} + d_{y}^{2}m$ $I_{y} > I_{y'}$	$I_z = I_{z'} + d_z^2 m$ $I_z > I_{z'}$