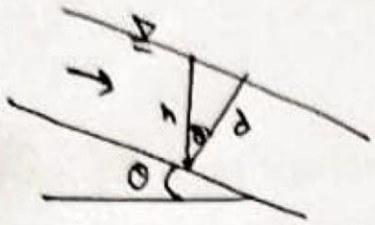
Depth of flow, h.

depth of flow section, d

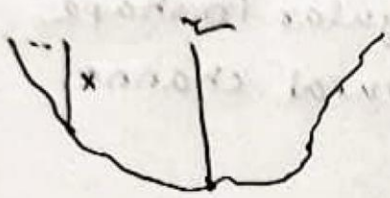


section depth normal to the dir. of flow

$d = h\cos\theta$

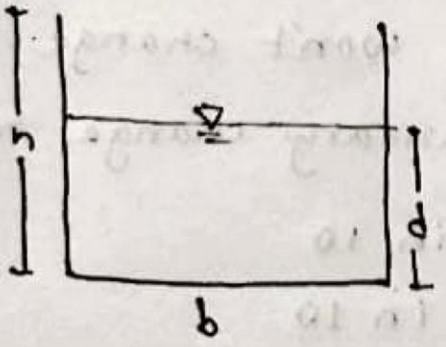
slope na thakle h = d hoito

consider lowest point



Stage - datum lvl., can be neg. w.r.t. datum

Flow area: A



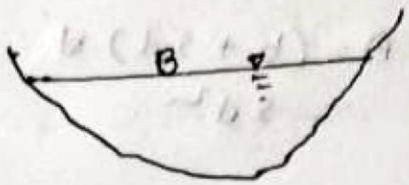
$A = bd$

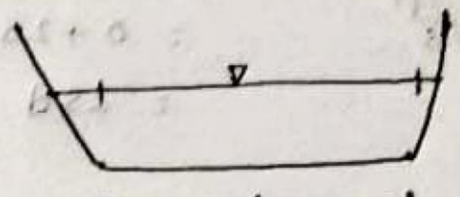
Wetted perimeter, P

(channel er shatha jeta lege ashe

$P = b + 2 \times d$

Top width, B

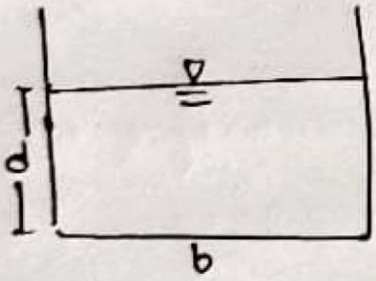




hydraulic radius, $R = \frac{A}{P}$

depth, $D = \frac{A}{B}$

A = hori. belonging area (A) x dist.



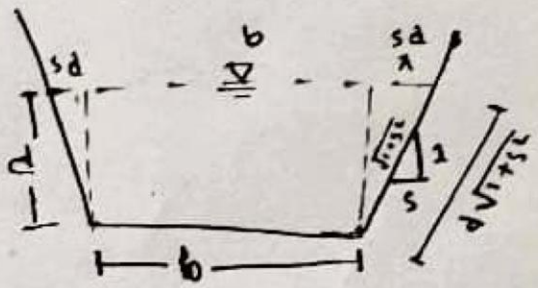
$A = bd$

$B = b$

$P = b + 2 \times d$

$R = \frac{bd}{b+2d}$

$D = \frac{bd}{b} = d$



$\frac{x}{s} = \frac{d}{1}$

$x = sd$

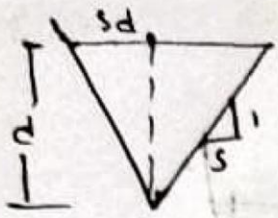
$A = \frac{b + b + 2sd}{2} \times d = \frac{2(b+sd)}{2} \times d = (b+sd)d$

$B = b + 2 \times sd$

$P = b + 2d\sqrt{1+s^2}$

$R = \frac{(b+sd)d}{b + 2d\sqrt{1+s^2}}$

$D =$



$B = b + 2sd$ $\quad P = 2d\sqrt{1+s^2}$

$= 0 + 2sd$ $\quad A = (b + sd)d$

$= 2sd$ $\quad = sd^2$

trapezoidal er moloi just b nai, so, $b = 0$.

—

parabolic — shuttro diye dibe

circle —

