

EPANET - continued

- "Demonstrate" installing on windows

1/

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-
- Simple examples (identical to notes)

- Freeswmm access.

-
- complicated

- controls

- w/q time varying

~~http://www.ddns.net
texas-skew
peakq_73 \$here~~

Demo install of
GUI software.

Go thru some examples.

[http://freeswmm.ddns.net/
freeswmm-webroot/
EPANET-Files/](http://freeswmm.ddns.net/freeswmm-webroot/EPANET-Files/)

⋮

•.net ← EPANET GUI
input file files

•.bmp ← Bbemaps

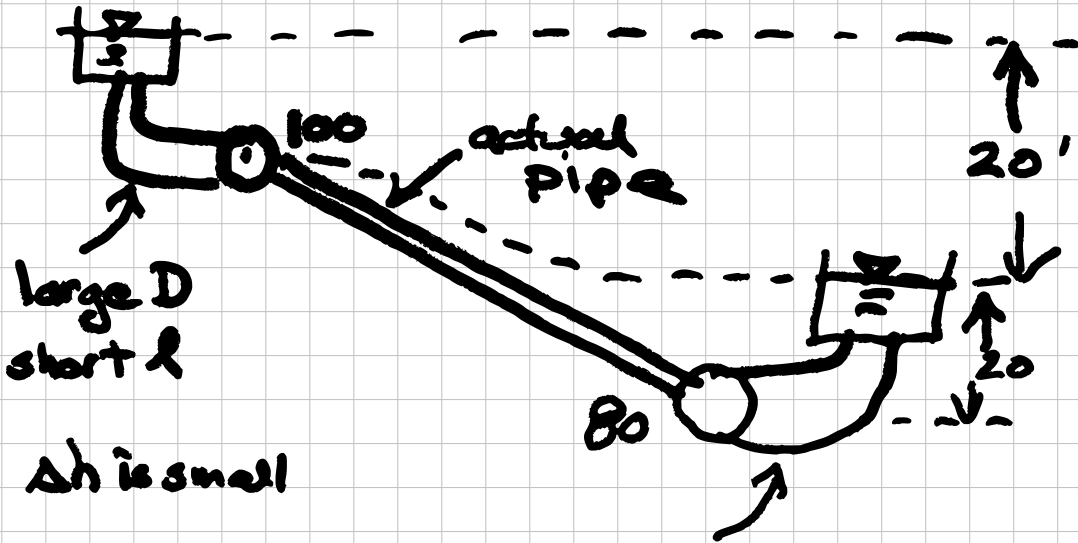
•.inp ← ASCII input file
(Toolkit)

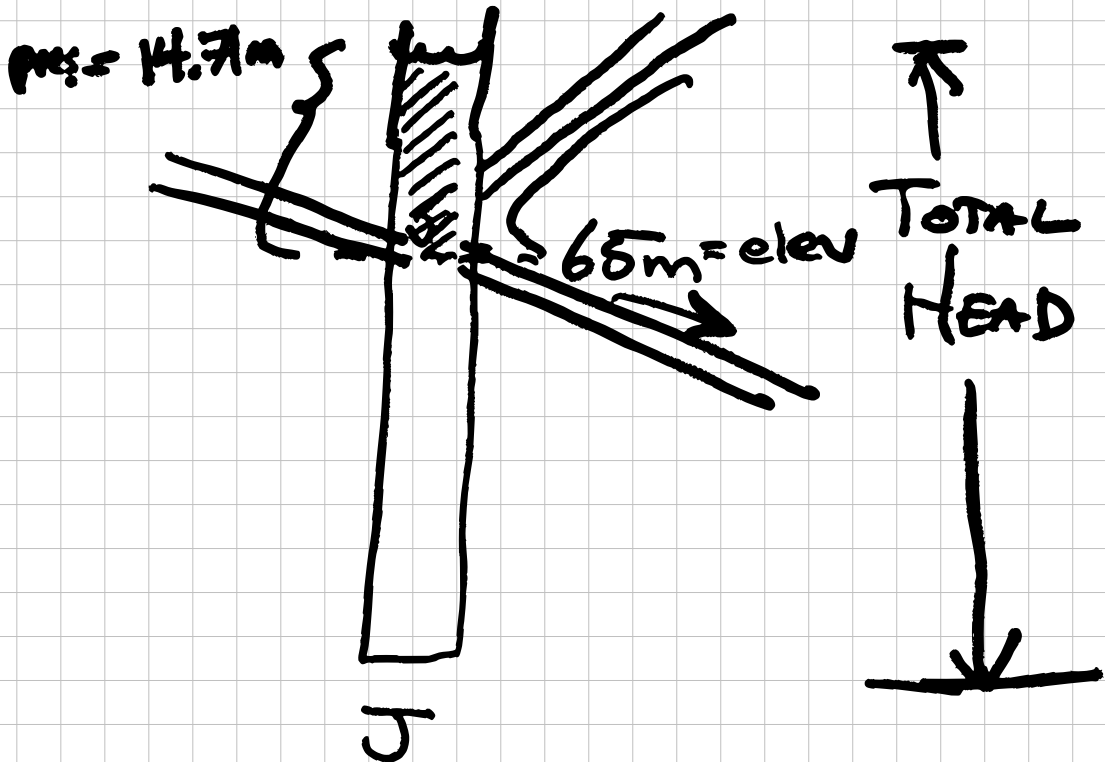
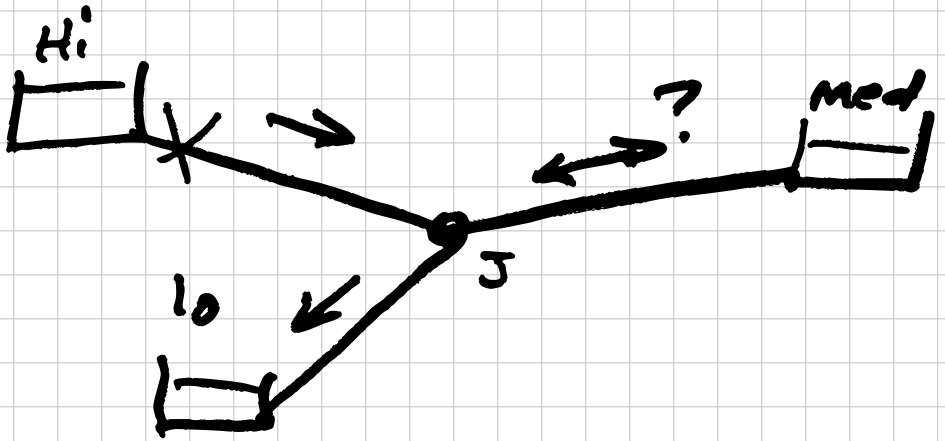
download

EX1.net

EX1.bmp

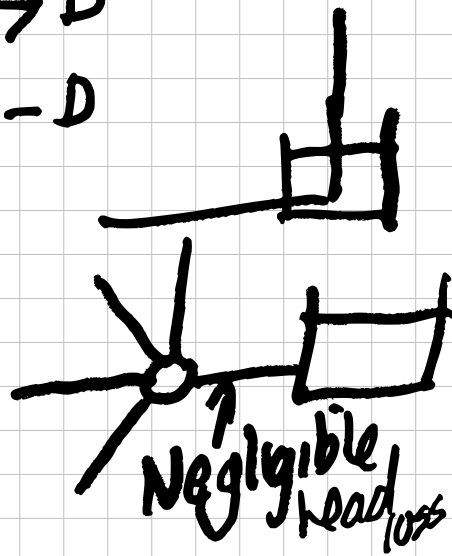
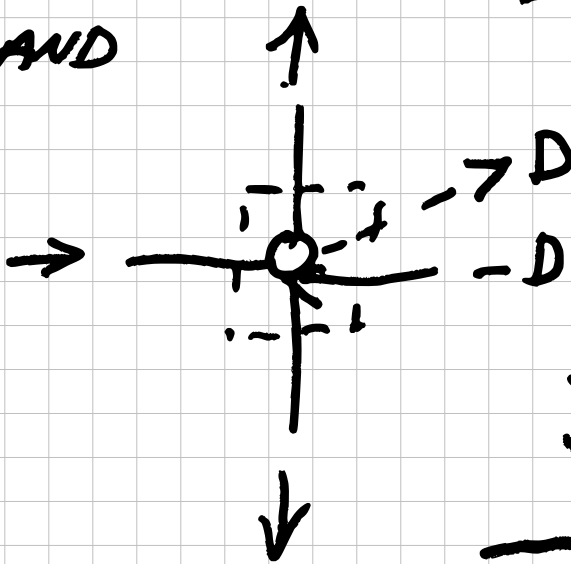
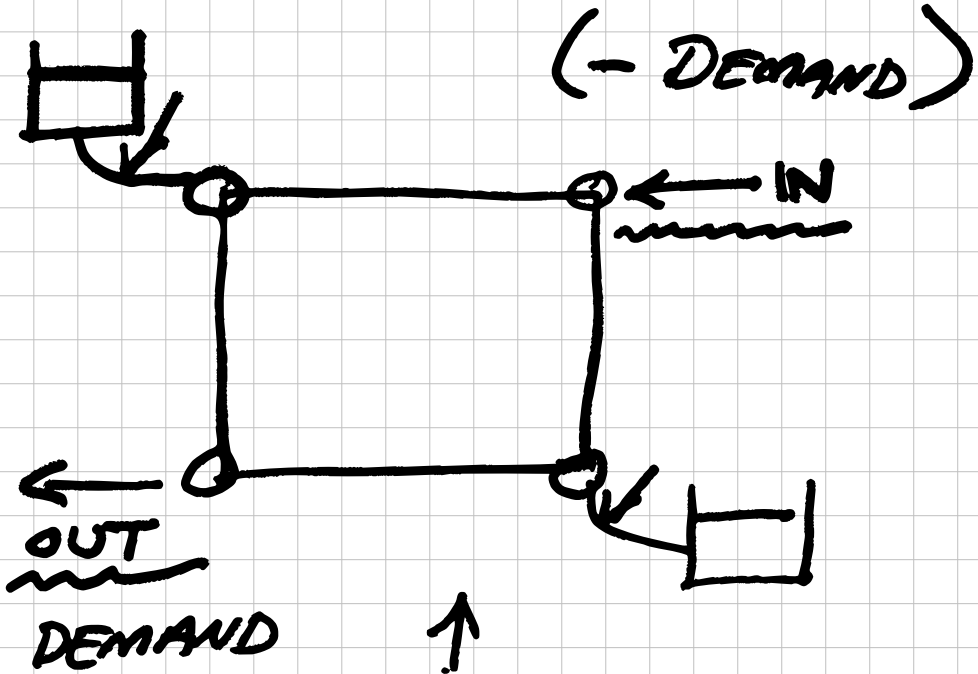
EX1.inp





- add link to YOUTUBE

EXAMPLE 4



EXAMPLE 5 ^{add video!}

PUMPS.

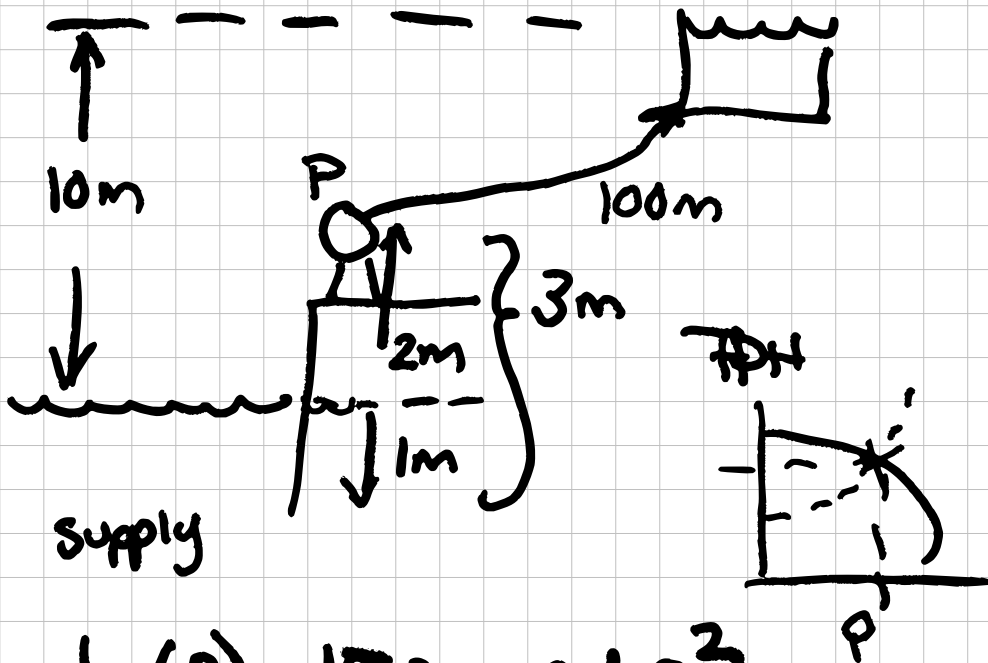
Special link

origin

destination

Pumps \Rightarrow direction

Associate a pump curve.



$$h_p(Q) = 15.0 - 0.1 Q^2$$

lift 10m

100m 100mm $k_s = 0.1$

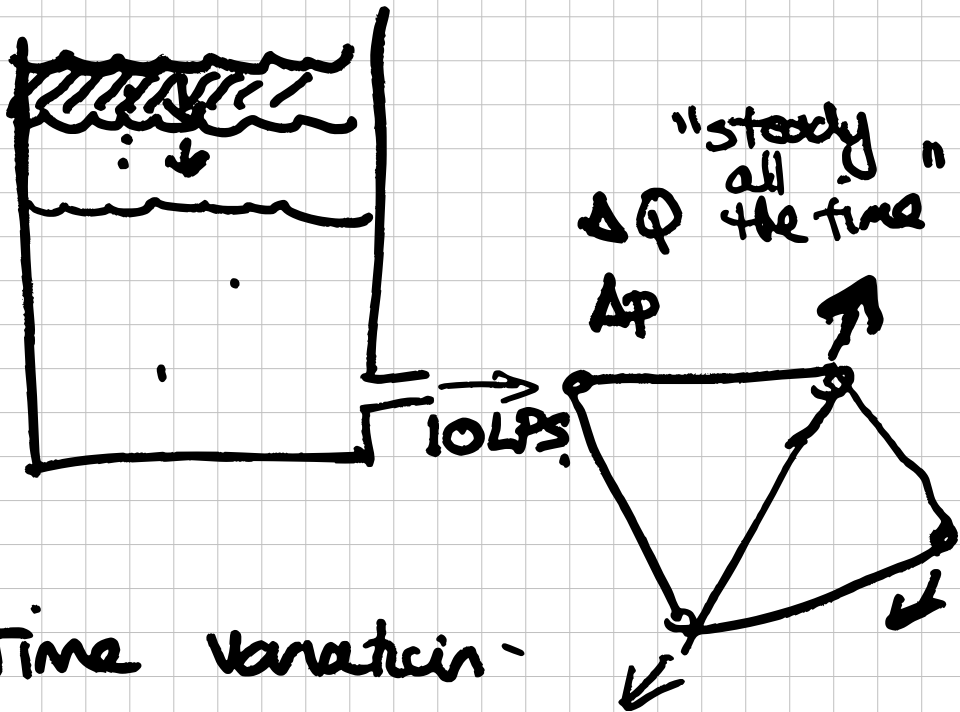
4m 100m $k_s = 0.1$

$$15 - 0.1 Q^2$$

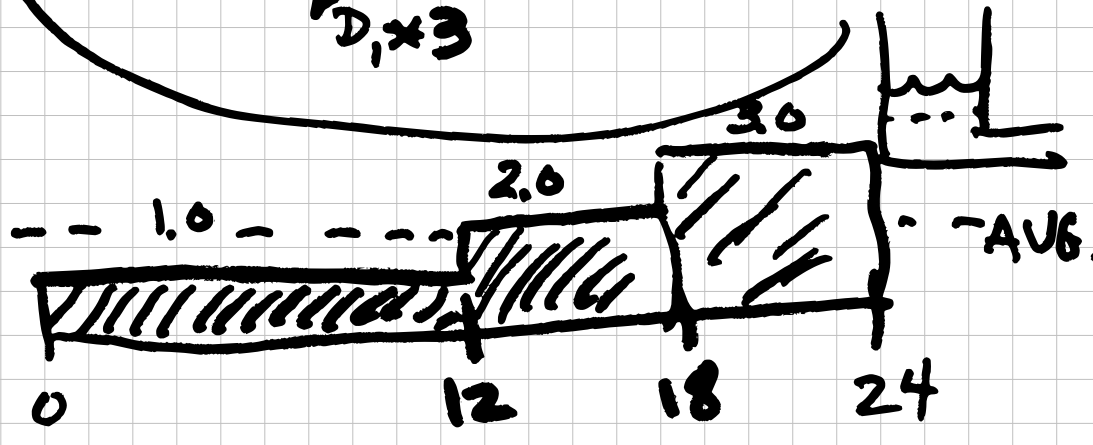
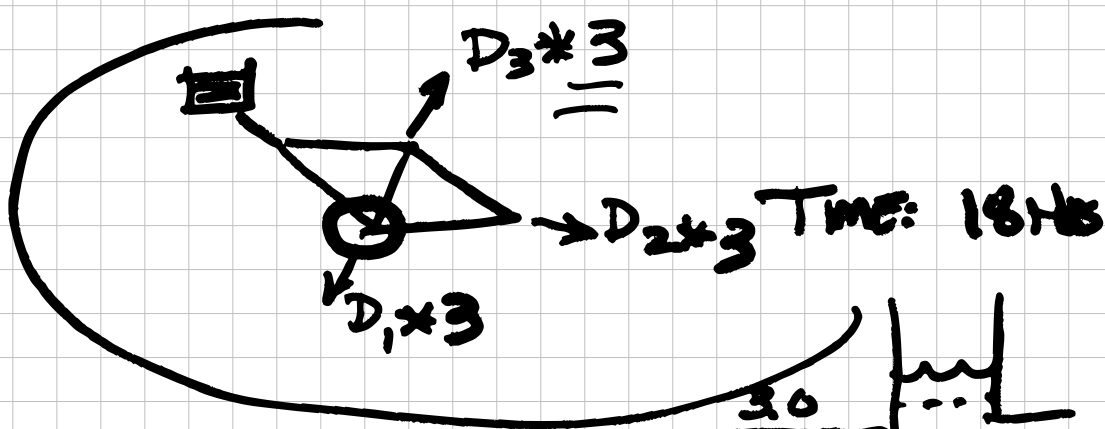
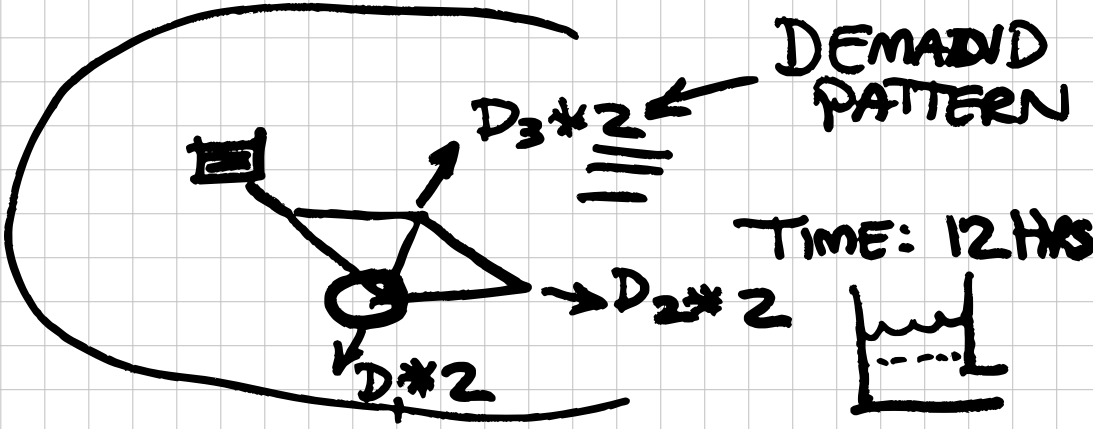
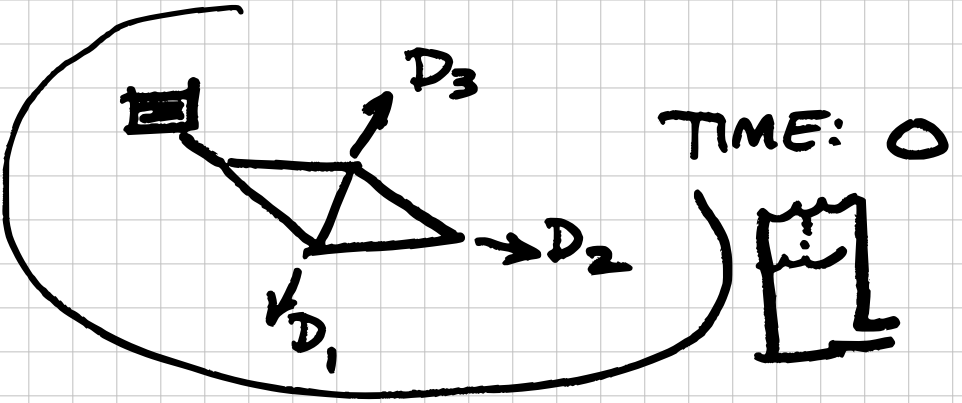
H	Q	↑ lps
15	0	
14.9	1	
14.6	2	

Steady state

- No concept of time varying behavior.



Time variation -
- Extended period simulation



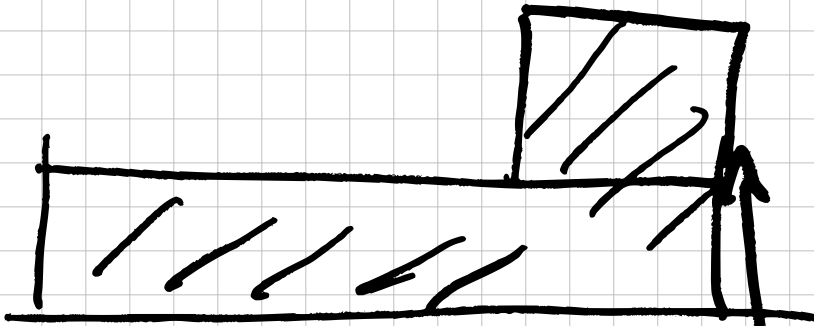
HYDRAULIC TIME STEP

HOW LONG THINGS
DON'T CHANGE

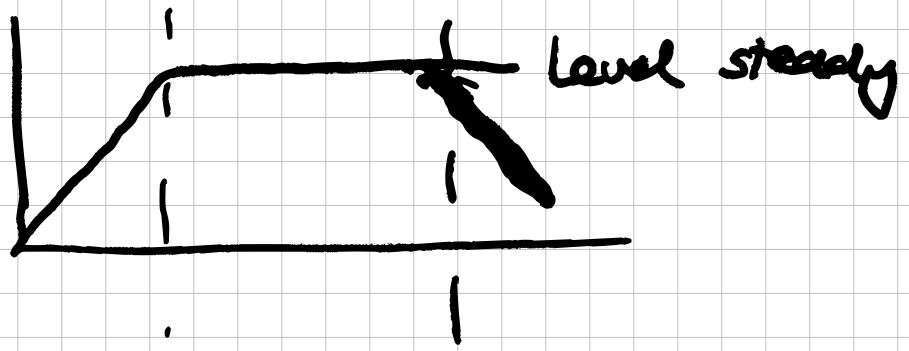
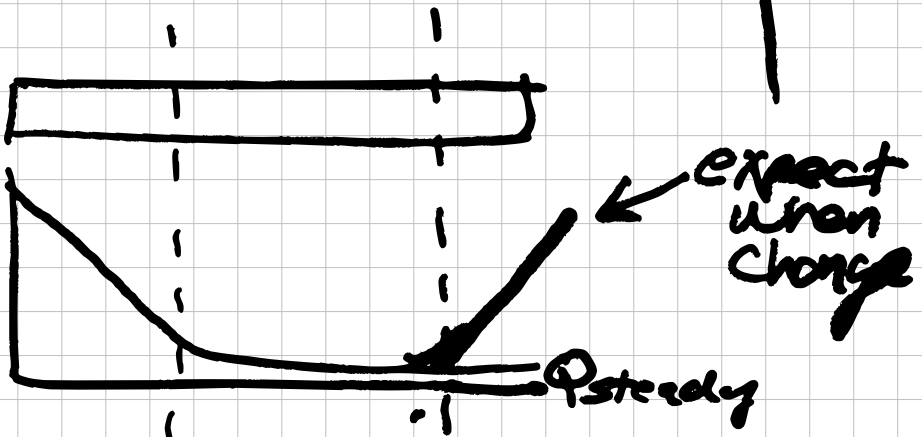
USUALLY AN HOUR OR SO.

WAT. QUAL TIME STEP

~ MINUTES



24 hrs



Brand name
is

ReMarkable

It 500 USD

- Amazon has
similar tool