

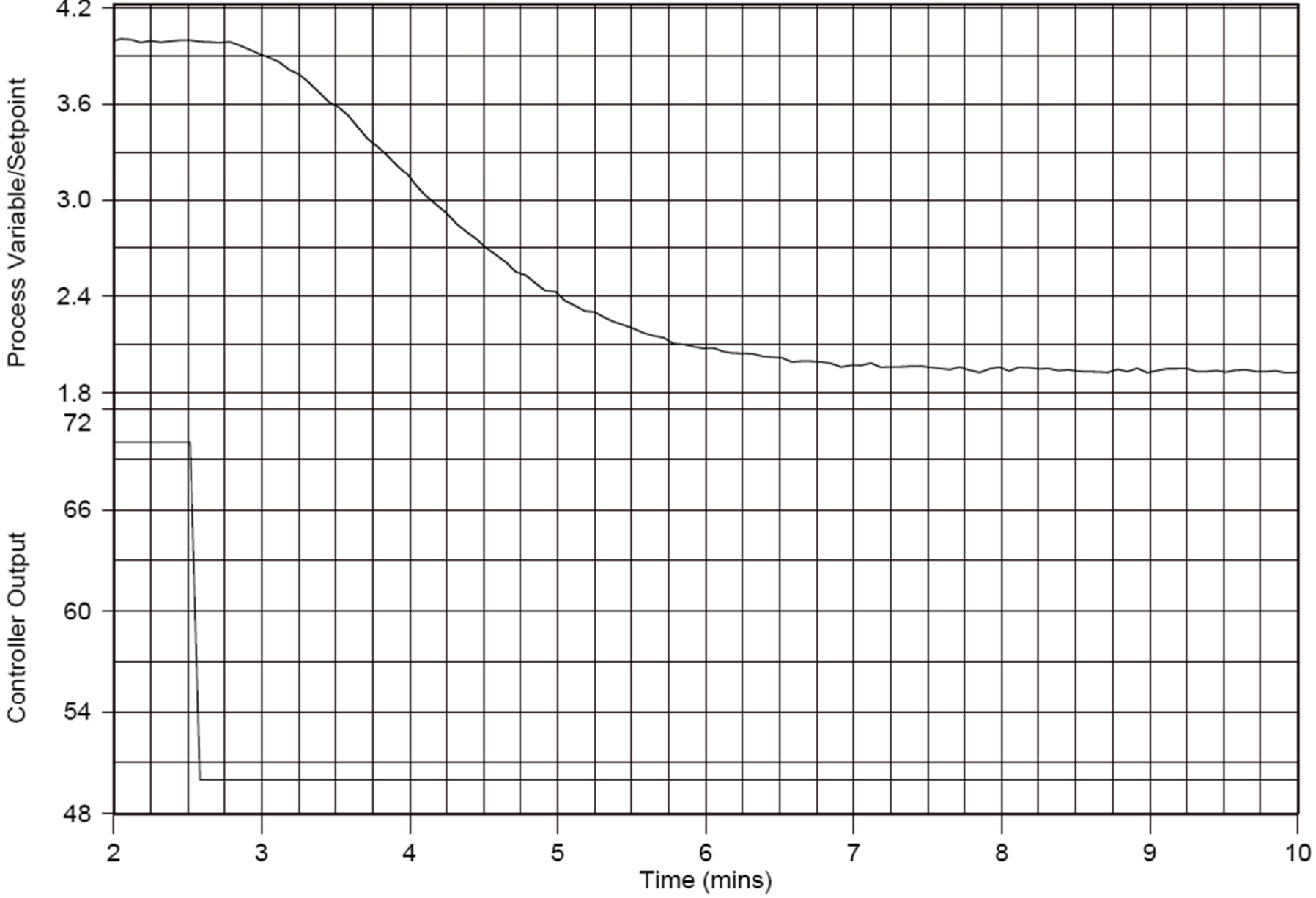
Manual Fitting (FOPDT)

1. Find θ_p
2. Find y_∞
3. Find Δy_{\max}
4. Find $y_{0.632}$
5. Find $t_{0.632}$
6. Find τ_p
7. Find $K_p = \Delta y_{\max} / \Delta u$

Loop-Pro: Gravity Drained Tanks

Process: Gravity Drained Tank

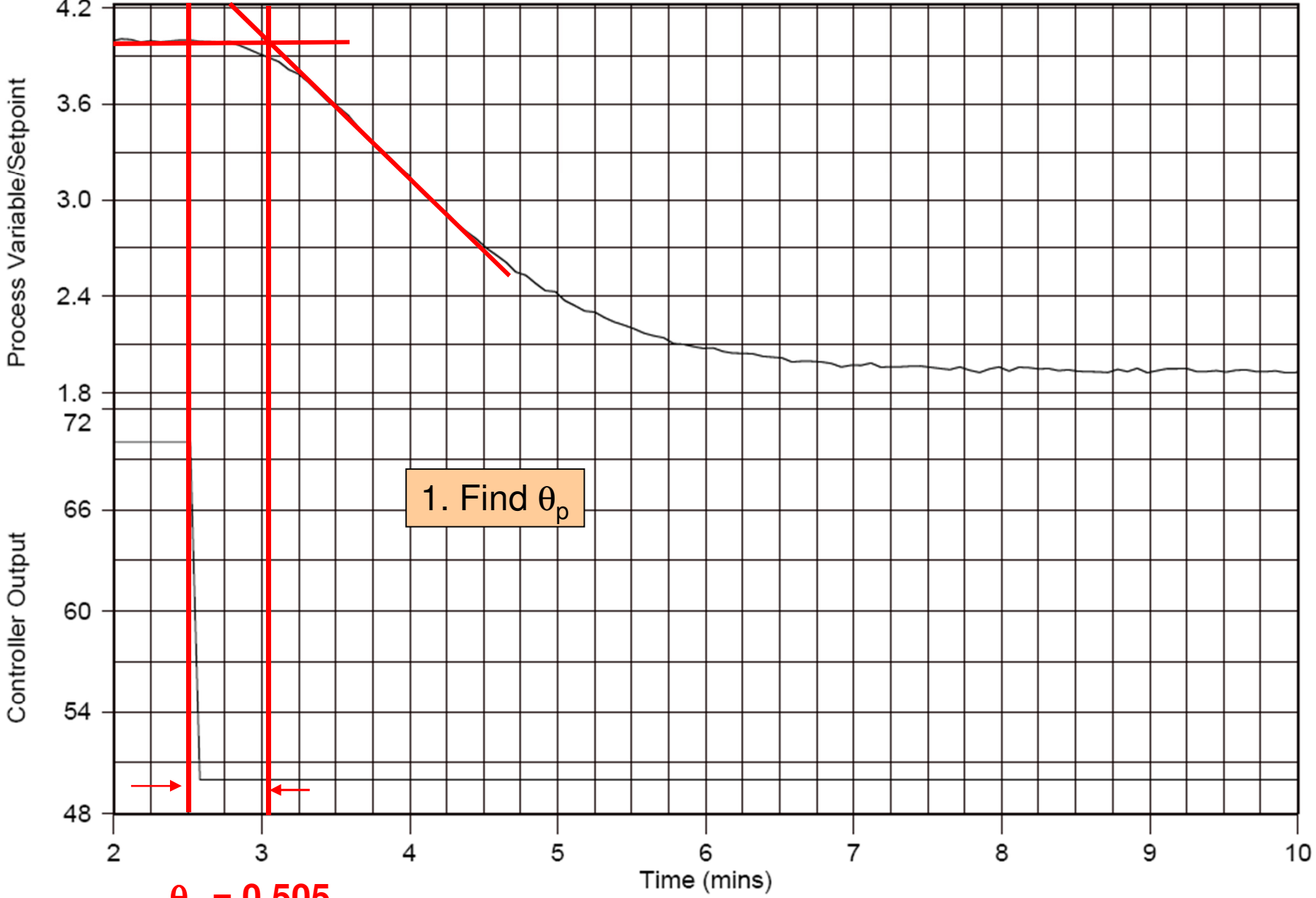
Cont.: Manual Mode



Loop-Pro: Gravity Drained Tanks

Process: Gravity Drained Tank

Cont.: Manual Mode

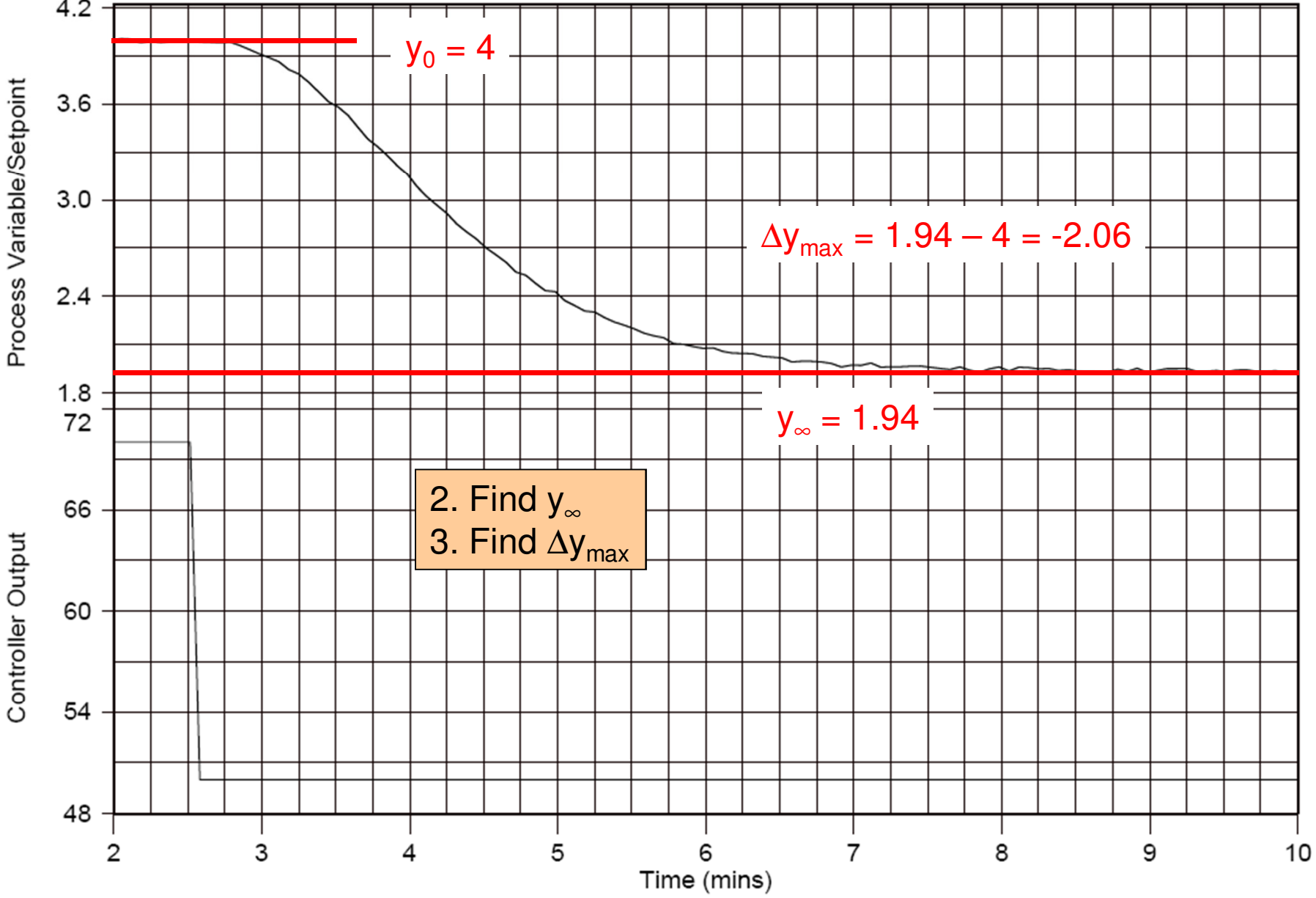


$\theta_p = 0.505$

Loop-Pro: Gravity Drained Tanks

Process: Gravity Drained Tank

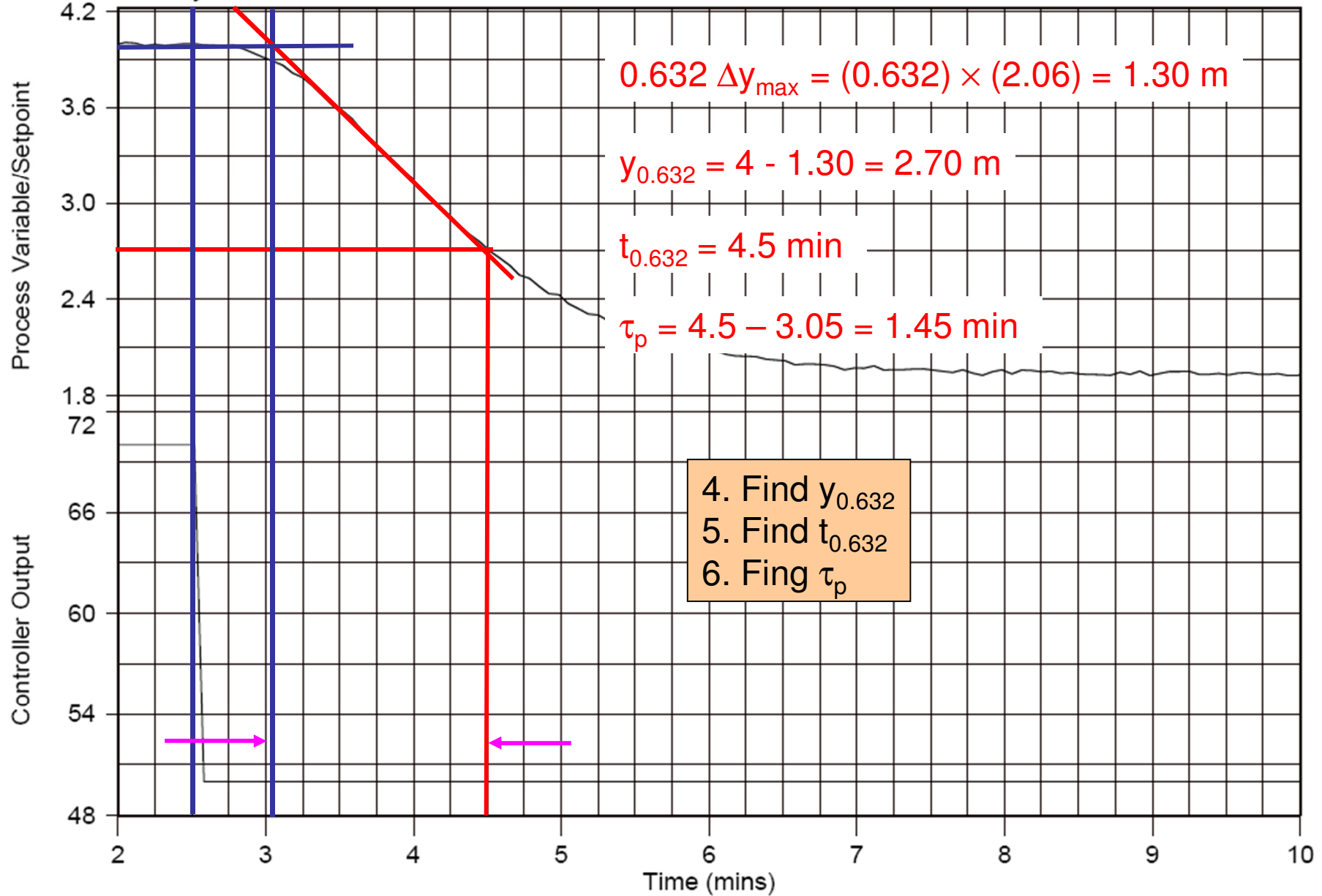
Cont.: Manual Mode



Loop-Pro: Gravity Drained Tanks

Process: Gravity Drained Tank

Cont.: Manual Mode



Caution: Account for dead time when calculating τ_p !

7. Find K_p

- $K_p = \Delta y_{\max} / \Delta u = -2.06 \text{ m}/-15\%$
 $= 0.137 \text{ m}/\%$