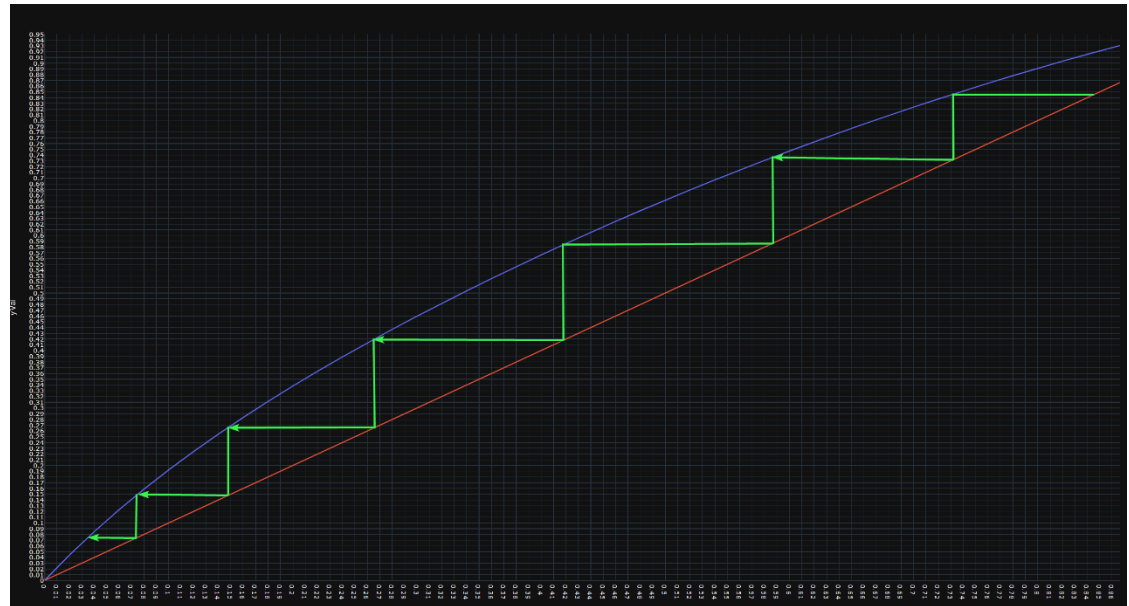
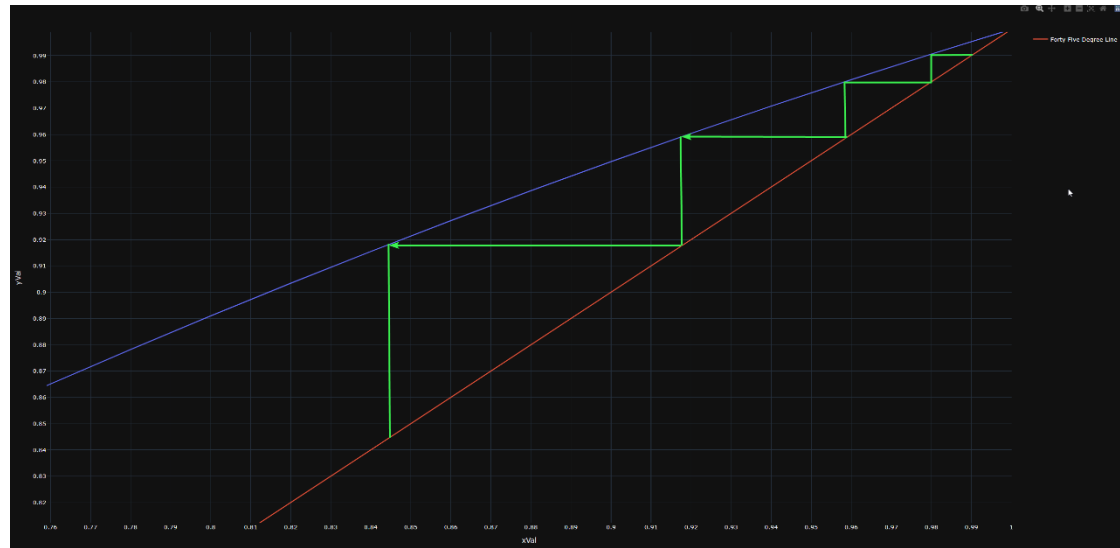
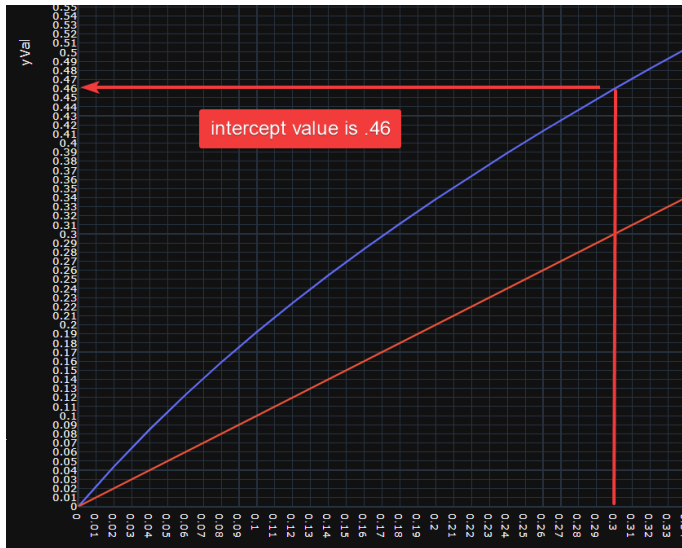


File: <https://github.com/hunterviolette/CHE362/blob/master/scripts/hw10.py>

PROBLEM 1 A - 13 TRAYS
PROBLEM 1 B - $13/.75 = 17.3 \approx 18$



```
Flow rates: {B: 352040.816326531*mole/hour, D: 147959.183673469*mole/hour}  
Rmin: 3.31250000000000, R: 3.97500000000000
```

```
==== Part C ====  
dT Ln, condenser: 131.11700047464612 Δ°F  
dT, reboiler: 50 Δ°F  
Heat duty, condenser: 24.192792 GJ/h  
Heat duty, reboiler: 24.192792 GJ/h  
Heat transfer coefficient, condenser: 150 Btu/ft2/h/Δ°F  
Heat transfer coefficient, reboiler: 200 Btu/ft2/h/Δ°F  
Heat transfer area, condenser: 108.31538326646417 m2  
Heat transfer area, reboiler: 213.02982238740688 m2
```

```
==== Part D ====  
F_LV: 0.05011824251839097  
kV: 0.38524612240309186 ft/s  
uC: 6.01371979633009 ft/s  
uO: 4.510289847247567 ft/s  
V: 736096.0249999999 mol/h  
Vdot: 217.62596106998467 ft3/s  
area: 48.25099238417954 ft2  
actual area: 60.313740480224425 ft2  
diameter: 8.763209427505183 ft
```