

Problem 13**Rainfall Excess based on the ϕ -Index for the NB Ralston Creek (July 1972)**

[a] 1 pt

$$\Sigma P = \boxed{4.10} \text{ in}$$

[b] 2 pts

Time (hr)	i (in/hr)
12	0.00
13	0.32
14	0.71
15	1.58
16	1.21
17	0.24
18	0.02
19	0.01
20	0.00
21	0.00

[c] 1 pt

$$\Sigma F = \boxed{2.09} \text{ in}$$

[d] 3 pts

Time (hr)	P_e (in)
12	0.00
13	0.00
14	0.21
15	1.08
16	0.71
17	0.00
18	0.00
19	0.00
20	0.00
21	0.00

[e] 1 pt

$$r_d = \boxed{2.01} \text{ in}$$

[f] 1 pt

$$V_d = \boxed{321.87} \text{ ac-ft}$$

[g] 1 pt

$$t_r = \boxed{3} \text{ hr}$$

[h] 1 pt

$$C = \boxed{0.4893}$$

0.001
0.322
0.712
1.579
1.214

0.235
0.02
0.009
0.002
0.004
11