

Example 7.3 (see book example 7.6 pp. 226-228)

A pharmaceutical product having a concentration of 0.75 U/L is adsorbed in a laboratory column of 15 cm length and a flowrate of 400 mL/h. The following breakthrough data are obtained:

time (h)	y_i (U/L)
20.5	0.01
26.7	0.17
32.0	0.39
36.0	0.53

Assuming that breakthrough is defined as $y_i/y_F = 0.05$, find:

- a) LUB
- b) The breakout time for a 30 cm column using the same feed and superficial velocity.