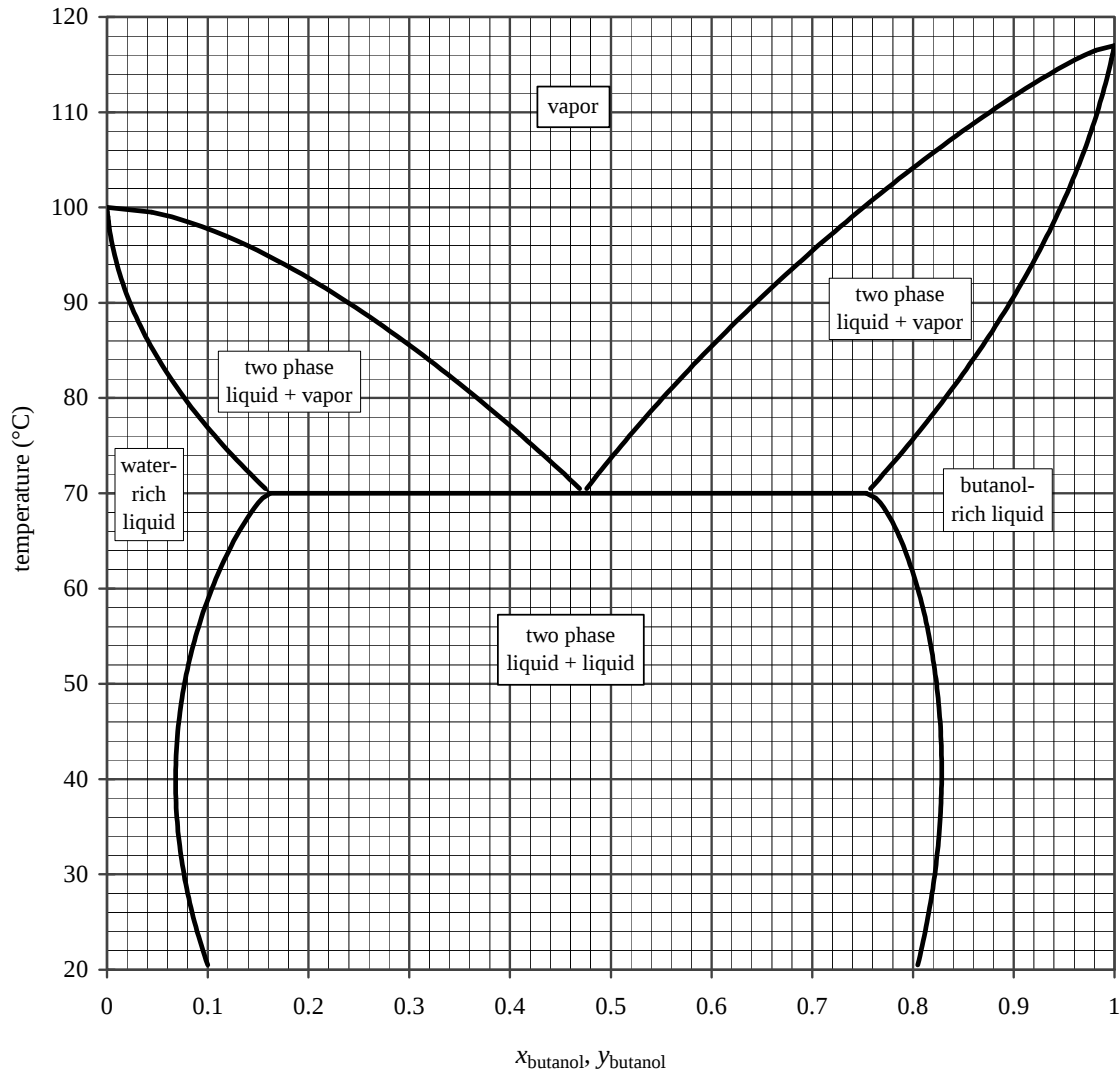


4.26 temperature-composition phase diagram for 1-butanol + water mixtures at 1 atm.



from *Chemical Engineering Design and Analysis: An Introduction*
T. M. Duncan and J. A. Reimer, Cambridge University Press, 2nd ed., 2019.

©Cambridge University Press.

4.26 blank tables.

(C) Complete the following table for a mixture of 0.90 mol butanol and 0.10 mol water. If only one phase is present, leave the last three columns blank.

T (°C)	1 or 2 phases?	first phase			second phase		
		liquid or vapor?	mol fraction butanol	total moles	liquid or vapor?	mol fraction butanol	total moles
60							
80							
105							
120							

(D) Complete the following table for a mixture of 0.65 mol butanol and 0.35 mol water. If only one phase is present, leave the last three columns blank.

T (°C)	1 or 2 phases?	first phase			second phase		
		liquid or vapor?	mol fraction butanol	total moles	liquid or vapor?	mol fraction butanol	total moles
60							
80							
105							
120							

from *Chemical Engineering Design and Analysis: An Introduction*
T. M. Duncan and J. A. Reimer, Cambridge University Press, 2nd ed., 2019.

©Cambridge University Press.