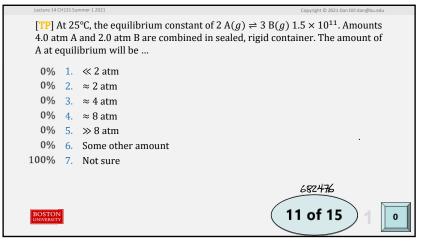
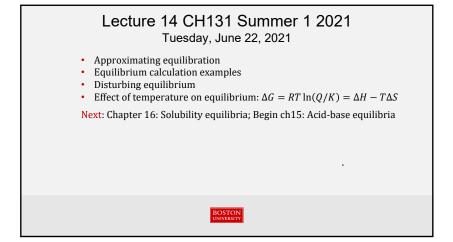
2





1

Approximating equilibration

When the equilibrium constant is either very big or very small, the calculation of equilibrium amounts is greatly simplified.

Approximating equilibration

When K 1 the equilibrium amounts will be mostly reactants. This means a good starting point is to adjust the initial amounts so that the amount of limiting product is 0.

The reason this is a good starting point is that the small amount of product that must form to achieve equilibrium will change the amount of reactants negligibly.

A - B

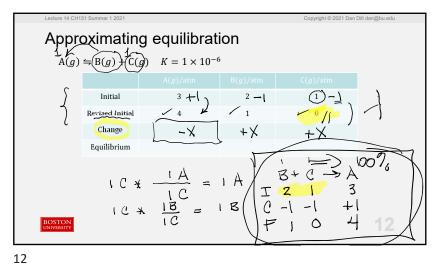
I z 3

E 2 0

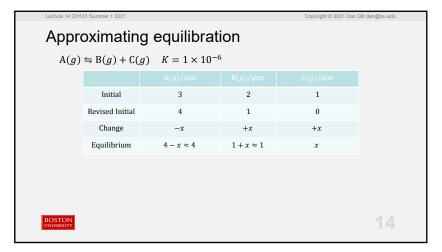
9

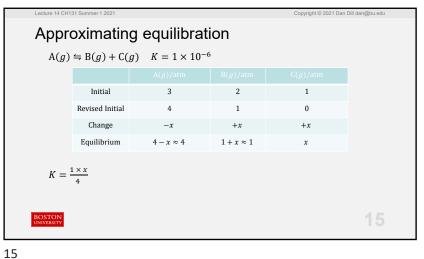
Copyright © 2021 Dan Dill dan@bu.edu

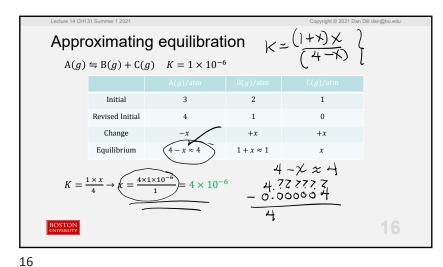
	Lecture 14 CH131 Summer 1 2021 Copyright © 2021 Dan  Approximating equilibration				
A(g)	$\Rightarrow B(g) + C(g)$	$K = 1 \times 10^{-1}$	-6 //		
	Initial	3	2	1	
	Revised Initial				
	Change				
	Equilibrium			20	
BOSTON UNIVERSITY					11

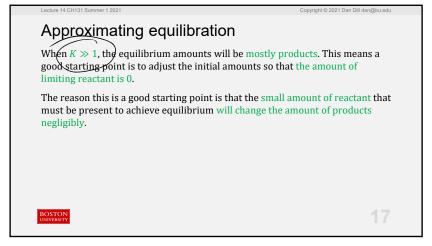


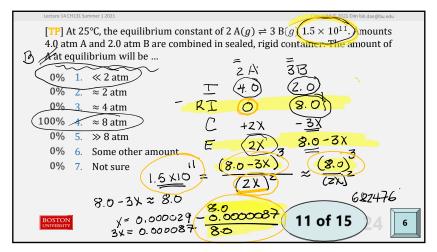
ı	Lecture 14 CH131 Summer 1 2021				Copyright © 2021 Dan	Copyright © 2021 Dan Dill dan@bu.edu		
	Approximating equilibration							
	$A(g) = B(g) + C(g)  K = 1 \times 10^{-6}$							
		Initial	3	2	1			
		Revised Initial	4	1	0			
		Change	-x	+x	+x			
		Equilibrium						
	BOSTON					13		



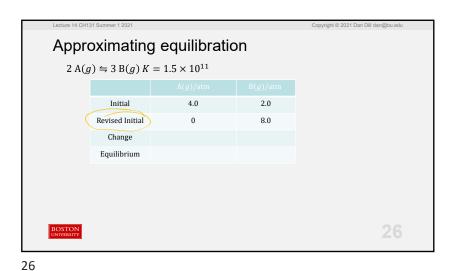




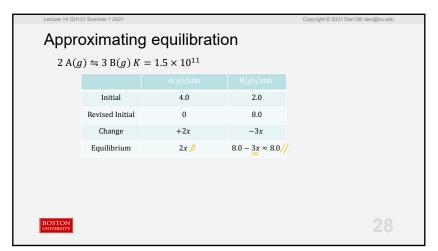




Lecture 14 CH1	31 Summer 1 2021			Copyright © 2021 Dan Dill dan@bu.edu
	_	g equilibration	n	
2 A(g	g(g) = 3 B(g) K	$= 1.5 \times 10^{11}$		
		A(g)/atm		
	Initial	4.0	2.0	
	Revised Initial			
	Change			
	Equilibrium	<b>%</b> 0		
BOSTON				25
W. W. L. C. ST.				



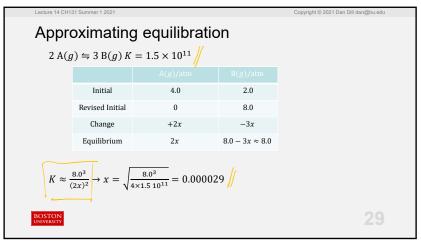
Lecture 14 CH131 Summer 1 2021				Copyright © 2021 Dan Dill dan@bu.edu		
Approximating equilibration						
$2 A(g) = 3 B(g) K = 1.5 \times 10^{11}$						
	Initial	4.0	2.0			
	Revised Initial	0	8.0			
	Change	+2x	-3x			
	Equilibrium					
BOSTON UNIVERSITY				27		

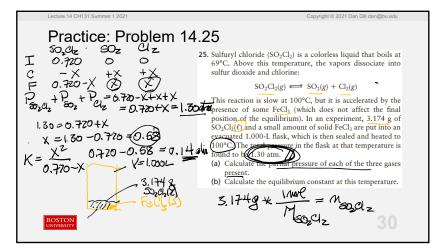


27 28

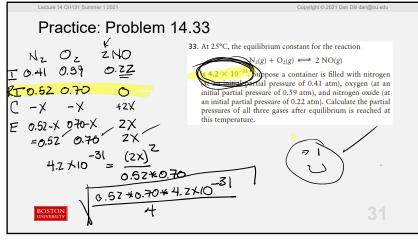
Copyright © 2021 Dan Dill dan@bu.edu

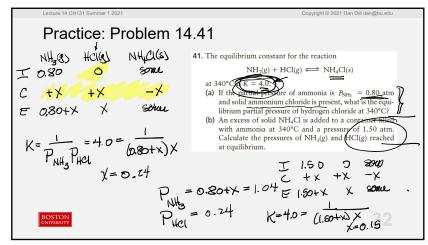
25

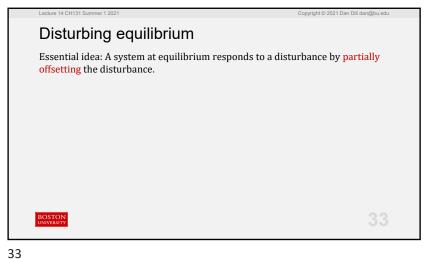


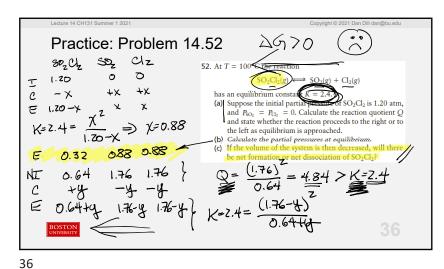


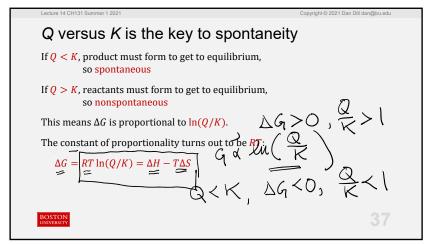
29 30

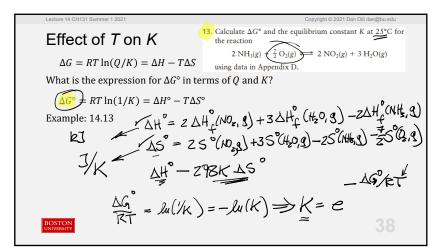






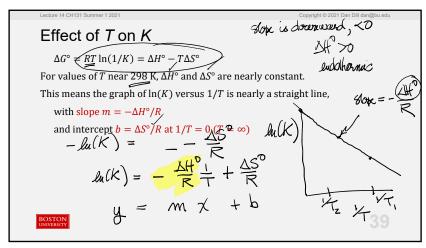


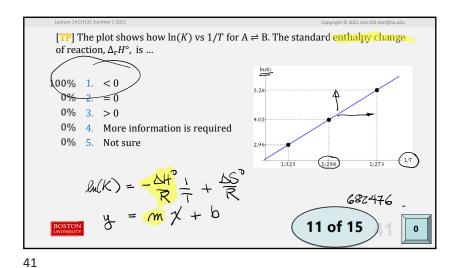


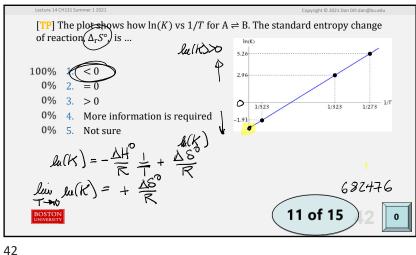


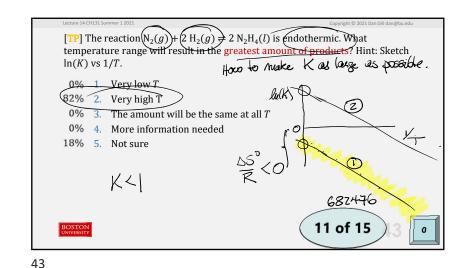
37 38

Copyright © 2021 Dan Dill dan@bu.edu









Copyright © 2021 Dan Dill dan@bu.edu

