

Chapter 7 Study Guide

This study guide is based on questions from the Chapter 7 Practice Test in the student resource.

Question	I can ...	Help Needed	Refer to
#1	identify the characteristics of the graph of an exponential function of the form $y = a^x$, $a > 0$, including the domain, range, horizontal asymptote, and intercepts, and explain the significance of the horizontal asymptote	<input type="checkbox"/> some <input type="checkbox"/> none	7.1 Examples 1, 2
#2	demonstrate an understanding of the effects of horizontal and vertical stretches and translations on the graphs of functions and their related equations	<input type="checkbox"/> some <input type="checkbox"/> none	7.2 Example 1
#3	determine the solution of an exponential equation	<input type="checkbox"/> some <input type="checkbox"/> none	7.1 Example 3
#4	expand powers of a binomial in a variety of ways	<input type="checkbox"/> some <input type="checkbox"/> none	7.3 Examples 1, 2
#5	solve problems that involve exponential equations	<input type="checkbox"/> some <input type="checkbox"/> none	7.3 Example 3
#6	write the equation of a transformed exponential function	<input type="checkbox"/> some <input type="checkbox"/> none	7.2 Examples 1, 2
#7	sketch the graph of $y - k = f(x)$, $y = f(x - h)$ or $y - k = f(x - h)$ for given values of h and k , given a sketch of the function $y = f(x)$, where the equation of $y = f(x)$ is not given	<input type="checkbox"/> some <input type="checkbox"/> none	7.2 Example 1
#8	demonstrate an understanding of the effects of horizontal and vertical stretches and translations on the graphs of functions and their related equations	<input type="checkbox"/> some <input type="checkbox"/> none	7.2 Example 1
#9	determine the solution of an exponential equation	<input type="checkbox"/> some <input type="checkbox"/> none	7.3 Example 2
#10	determine the solution of an exponential equation in which the bases are not powers of one another, using a variety of strategies	<input type="checkbox"/> some <input type="checkbox"/> none	7.3 Example 3
#11	solve problems that involve exponential equations	<input type="checkbox"/> some <input type="checkbox"/> none	7.3 Example 3
#12	solve a problem that involves exponential growth or decay	<input type="checkbox"/> some <input type="checkbox"/> none	7.3 Example 3
#13	solve problems that involve the application of exponential equations to loans, mortgages, and investments	<input type="checkbox"/> some <input type="checkbox"/> none	7.3 Example 3
#14	solve problems that involve the application of exponential equations to loans, mortgages, and investments	<input type="checkbox"/> some <input type="checkbox"/> none	7.3 Example 3

