

## Chapter 5 Study Guide

This study guide is based on questions from the Chapter 5 Practice Test.

Question	I can ...	Help Needed	Refer to
#1	determine the characteristics (amplitude, asymptotes, domain, period, range, and zeros) of the graph of $y = \sin x$ , $y = \cos x$ , or $y = \tan x$	<input type="checkbox"/> some <input type="checkbox"/> none	5.1 Examples 1 and 2
	determine how varying the value of $a$ affects the graphs of $y = a \sin x$ and $y = a \cos x$	<input type="checkbox"/> some <input type="checkbox"/> none	5.1 Example 2
	determine how varying the value of $d$ affects the graphs of $y = \sin x + d$ and $y = \cos x + d$	<input type="checkbox"/> some <input type="checkbox"/> none	5.2 Example 3
#2	determine the characteristics (amplitude, asymptotes, domain, period, phase shift, range, and zeros) of the graph of a trigonometric function of the form $y = a \sin b(x - c) + d$ or $y = a \cos b(x - c) + d$	<input type="checkbox"/> some <input type="checkbox"/> none	5.2 Example 3
#3	determine how varying the value of $c$ affects the graphs of $y = a \sin (x - c)$ and $y = a \cos (x - c)$	<input type="checkbox"/> some <input type="checkbox"/> none	5.2 Example 2
#4	determine how varying the value of $b$ affects the graphs of $y = \sin bx$ and $y = \cos bx$	<input type="checkbox"/> some <input type="checkbox"/> none	5.1 Example 4
	determine how varying the value of $c$ affects the graphs of $y = \sin (x - c)$ and $y = \cos (x - c)$	<input type="checkbox"/> some <input type="checkbox"/> none	5.2 Example 3
#5	determine the values of $a$ , $b$ , $c$ , and $d$ for functions of the form $y = a \sin b(x - c) + d$ or $y = a \cos b(x - c) + d$ that correspond to a given graph, and write the equation of the function	<input type="checkbox"/> some <input type="checkbox"/> none	5.2 Example 4
#6	determine how varying the value of $a$ affects the graphs of $y = a \sin x$ and $y = a \cos x$	<input type="checkbox"/> some <input type="checkbox"/> none	5.1 Examples 2 and 4
	determine how varying the value of $d$ affects the graphs of $y = \sin x + d$ and $y = \cos x + d$	<input type="checkbox"/> some <input type="checkbox"/> none	5.2 Examples 2 and 3
	determine how varying the value of $c$ affects the graphs of $y = \sin (x - c)$ and $y = \cos (x - c)$	<input type="checkbox"/> some <input type="checkbox"/> none	5.2 Examples 1 and 3
	determine how varying the value of $b$ affects the graphs of $y = \sin bx$ and $y = \cos bx$	<input type="checkbox"/> some <input type="checkbox"/> none	5.1 Link the Ideas, Example 3
#7	explain how the characteristics of the graph of a trigonometric function relate to the conditions in a problem situation	<input type="checkbox"/> some <input type="checkbox"/> none	5.2 Example 5



Name: \_\_\_\_\_ Date: \_\_\_\_\_

**BLM 5–7**  
(continued)

Question	I can ...	Help Needed	Refer to
#8	determine the characteristics of the graph of $y = \sin x$ , or $y = \cos x$	<input type="checkbox"/> some <input type="checkbox"/> none	5.1 Example 4
#9	determine the characteristics (asymptotes, domain, period, and range) of the graph of $y = \tan x$	<input type="checkbox"/> some <input type="checkbox"/> none	5.3 Example 1
#10	determine the characteristics (amplitude, asymptotes, domain, period, phase shift, range, and zeros) of the graph of a trigonometric function of the form $y = a \sin b(x - c) + d$ or $y = a \cos b(x - c) + d$	<input type="checkbox"/> some <input type="checkbox"/> none	5.1 Examples 3 and 4
#11	determine the characteristics (amplitude, asymptotes, domain, period, phase shift, range, and zeros) of the graph of a trigonometric function of the form $y = a \sin b(x - c) + d$ or $y = a \cos b(x - c) + d$	<input type="checkbox"/> some <input type="checkbox"/> none	5.2 Example 3
#12	determine, algebraically, the solution of a trigonometric equation, stating the solution in exact form when possible	<input type="checkbox"/> some <input type="checkbox"/> none	5.1 Example 4 5.2 Example 5
#13	determine, graphically, the solution of a trigonometric equation	<input type="checkbox"/> some <input type="checkbox"/> none	5.4 Examples 1 and 2
#14	determine the characteristics (amplitude, asymptotes, domain, period, range, and zeros) of the graph of $y = \sin x$ , $y = \cos x$ , or $y = \tan x$	<input type="checkbox"/> some <input type="checkbox"/> none	5.1 Examples 1 and 2
#15	determine a trigonometric function that models a situation to solve a problem	<input type="checkbox"/> some <input type="checkbox"/> none	5.4 Example 4
	determine, graphically and algebraically, the solution of a trigonometric equation, stating the solution in exact form when possible	<input type="checkbox"/> some <input type="checkbox"/> none	5.4 Example 3
#16	determine the values of $a$ , $b$ , $c$ , and $d$ for functions of the form $y = a \sin b(x - c) + d$ or $y = a \cos b(x - c) + d$ that correspond to a given graph, and write the equation of the function	<input type="checkbox"/> some <input type="checkbox"/> none	5.2 Examples 3 and 4
#17	determine the values of $a$ , $b$ , $c$ , and $d$ for functions of the form $y = a \sin b(x - c) + d$ or $y = a \cos b(x - c) + d$ that correspond to a given graph, and write the equation of the function	<input type="checkbox"/> some <input type="checkbox"/> none	5.1 Examples 1–4

