

Name: _____

Date: _____

BLM 3–7

Chapter 3 Study Guide

This study guide is based on questions from the Chapter 3 Practice Test in the student resource.

Question	I can ...	Help Needed	Refer to
#1	describe the number of x -intercepts of even-degree and odd-degree polynomial functions up to degree 5	<input type="checkbox"/> some <input type="checkbox"/> none	3.1 Example 2
#2	divide a polynomial by a binomial of the form $x - a$ using the long-division process	<input type="checkbox"/> some <input type="checkbox"/> none	3.2 Example 1
	determine the remainder resulting from the division of a polynomial in x , $P(x)$, by a binomial of the form $x - a$	<input type="checkbox"/> some <input type="checkbox"/> none	3.2 Example 4
#3	determine the possible integer values for the zeros of a polynomial function using the integral zero theorem	<input type="checkbox"/> some <input type="checkbox"/> none	3.3 Example 2
#4	determine whether a given binomial is a factor of a polynomial without having to use long or synthetic division	<input type="checkbox"/> some <input type="checkbox"/> none	3.3 Link the Ideas, Example 1
#5	describe how each parameter transforms the graph of the general polynomial function $y = x^n$, $n \in \mathbb{N}$, to obtain the form $y = a(b(x - h))^n + k$	<input type="checkbox"/> some <input type="checkbox"/> none	3.4 Link the Ideas
#6	determine the real roots of the equation of a polynomial function	<input type="checkbox"/> some <input type="checkbox"/> none	3.4 Link the Ideas, Example 4
#7	determine the factors of a polynomial, $P(x)$, using the integral zero theorem	<input type="checkbox"/> some <input type="checkbox"/> none	3.3 Example 2
#8	analyze graphs of polynomial functions	<input type="checkbox"/> some <input type="checkbox"/> none	3.4 Example 1
#9	model and solve problems involving polynomial functions	<input type="checkbox"/> some <input type="checkbox"/> none	3.4 Example 4
#10	identify the parameters a , b , h , and k in a polynomial function and describe how each parameter transforms the graph of the general polynomial function $y = x^n$, $n \in \mathbb{N}$, to obtain the form $y = a(b(x - h))^n + k$	<input type="checkbox"/> some <input type="checkbox"/> none	3.4 Example 3

