

## Integrated II Chapter 2 Study Guide

The tests in this course will assess 50% new material from the current chapter and 50% from previous chapters.

Not all of these topics will be on the test, but they will help you organize your study time.

### Chapter 2

- Use a flowchart to prove that triangles are congruent 2-12, 2-13
- Use a flowchart to prove that triangles are similar 2-90, 2-92
- Write the converse of a conditional statement (if-then) in if-then form and/or as an arrow diagram & state if the converse is true or false and explain why or why not. 2-23, 2-24
- Dilate a figure using a given scale factor. 2-47a, 2-51
- Use the definition of similar figures (corresponding angles are congruent & corresponding sides are proportional) to identify if two figures are similar or not. 2-49, 2-67
- Given two similar figures, find missing sides by setting up proportions. 2-85, 2-91, 2-96, 2-108
- Identify if two triangles are similar using  $AA \sim$ ,  $SAS \sim$ ,  $SSS \sim$ . 2-84, 2-93, 2-94, 2-114

### Chapter 1

- Checkpoint 1: Linear and Exponential Relationships 1-65, 1-79, 1-90, 1-103, 1-51, 1-47, 2-55, 2-79
- Using the area model to express area as a product of two binomials  $(x+1)(x-4)$  and as a sum  $x^2-3x-4$
- Angle Pair Relationships to find missing values: vertical angles, linear pair, angles formed by two parallel lines cut by a transversal 1-72, 1-77, 2-22
- Properties of triangles: Triangle Sum Theorem, Triangle Inequality (the size of a 3rd segment in a triangle is related to the other two sides), the relationship between angles in a triangle and the side opposite them (largest angle is opposite longest side & smallest angle is opposite the shortest side) 1-110, 1-111, 2-28
- Solving equations 1-7, 1-26, 1-40
- Be able to use the rigid transformations on a set of given points. 1-62, 1-89, 1-102, 1-115
- Describe congruent triangles using both rigid transformations and SSS congruence, SAS congruence, HL congruence, ASA congruence, and AAS congruence 2-4, 2-6, 2-12, 2-13
- Describe characteristics of both graphs and polygons 1-29, 1-60, 1-92