

Math Makes Sense 9

Self Paced Study Guide

Exam Target Date: _____

NB1: When working through the assigned exercises and activities, you should check ALL your answers using the answer guide at the back of the book. Do **NOT** proceed to the next set of questions until you have corrected the section you are working on. I.e.: Do not wait to correct your answers till you have finished the whole page of assigned questions. Go back and **re-read** the notes and examples till you understand the concept when you are stuck or not getting something.

Chapter 9: Probability and Statistics

NB2: There are not many “calculations” to do in this chapter. Most of the work is considering how we collect, use and manipulate data to help us understand how things work, to make predictions and to make decisions about how to proceed, or the best course of action to take in a particular situation. We collect and use data to help us make informed opinions about many aspects of life, like how should the city of Edmonton proceed in the matter of the development of the downtown business district: note the matter of the proposed hockey arena for the Edmonton Oilers to play in.

Key Words: page 423. Either now or as you work through this chapter, define, illustrate or give an example of each word or idea. **Population, census, sample, valid conclusions, rubric, subjective judgement,**

Topic: 9.1 – Probability in Society

Read and study pages: 424-427.

Give special attention to: pg 425, the 4 ways to express a probability. Read the 3 examples carefully. How do **probabilities** affect **decisions** and **judgements**?

Basic Assignment: PRACTICE Qs 3 to 10, then Q 11, 14, 17.

Challenge Assignment: Math Link, Your World, pg 429.

Topic 9.2: Potential Problems With Collecting Data

Read and study pages: 431-434

Give special attention to: “Connect”, pg 432, and the 3 examples.

Basic Assignment: PRACTICE Qs 3 to 5, then choose two of 6 to 10, 13.

Challenge Assignment: 15, 16

Topic 9.3: Using Samples and Populations to Collect Data

Read and study pages: pg 438 to 440

Give special attention to: all examples

Basic Assignment: Qs 3 to 5, then two of 6 to 9, then 10

Challenge Assignment: one of 11 to 13

Topic 9.4: Selecting a Sample

Read and study pages: pg 446-448

Give special attention to: all examples

Basic Assignment: Qs 3,4,6, then 2 of 7 to 10

Challenge Assignment: 12

Topic 9.5: Designing a Project Plan (time permitting)

Read and study pages: pg 454-456

Give special attention to: all examples

Basic Assignment: In groups of two or three, design a project on a topic that interests you.

Challenge Assignment: Unit Problem, pg 461- With your group, Follow your project to completion and draw your conclusions.

Study Guide: Read pg 457

Chapter Review, pg 458-459. In the same groups, discuss the topics in 8 of the 16 questions. Limit yourself to 5 minutes per question.