

# Math Makes Sense 9

## Self Paced Study Guide

Exam Target Date: \_\_\_\_\_

### Chapter: 4      Linear Relations

**First, take the Practice Test on Page 204. Score your test and give yourself a per cent. \_\_\_\_\_ %**

**Key Words:** page 151. Either now or as you work through this chapter, define, illustrate or give an example of each word or idea.

### Topic: 4.1 Writing Equations to Solve Problems

**Read and study pages: 154-158**

**Give special attention to: PATTERN** behaviour. When analyzing a pattern, try to determine the parts that stay the **same** (constant) and the parts that **change**.

**NB:** 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.

**Basic Assignment: PRACTICE Qs on pages 159 -162.**

**Check:** #'s 1-10.

**Apply:** #'s 11, 12.

**Assessment Focus:** Work with a partner who is finished the Basic Assignment. Work together to complete 3 of Q's 13 -18.

**Challenge Assignment: Choose one of Q's 19 -21.**

**Microsoft Excel Challenge. Homework assignment.** Work through the example on page 163.

**Assignment. Do Check Q's 1 and 2.** Using your home computer, print, and hand them in for marking- 15 points @. Be sure to choose design and formatting suitable for the data being plotted. Label both x and y axes, and create a title for your graph.

### Topic 4.2 Linear Relations

**Read and study pages: 164 - 170**

**Give special attention to: the notes on pages 165 and 166.**

**In the examples on pgs 167 – 169, note how to decide whether or not to join the dots on a graph with a straight line.**

**Basic Assignment: Discuss the Ideas pg. 170: Answer the 3 questions.**

**PRACTICE Q's: Check: Q 4.**

**Apply: Q's 5, 6, 7, 9a, d, 10(choose 3), 11. Then choose #12 or #13.**

**Do ONE of Q's 14 to 16.**

**Challenge Assignment: Do the rest of Q's 14 - 17**

### Topic 4.3 Another form of the Equation for a Linear Relation

**Read and study pages: 174-177.**

**Give special attention to the equations for straight lines – vertical or horizontal. Note that when x is a constant value, the line formed is at right angles to the x axis – the line really follows the y axis profile..... and vice versa.**

**Basic Assignment: Check: Q's 4,5.**

**Apply: Q's 6 – 12.**

**Assessment Focus:** Choose a partner who has completed their assignment to this point. Work together to complete either Q 13 OR Q 14, and choose ONE of Q 15 – 17.

**Challenge Assignment:** If you have the time, complete any of Q's 19 - 21.

**Mid Unit Review, page 181**

**Topic 4.4 Matching Equations and Graphs**

**Read and study pages: 183-187.**

**Basic Assignment: Check: Q's 3**

**Apply: Q's 4 to 9, 11**

**Challenge Assignment: Q's 12, 13.**

**Topic 4.5 Using Graphs to Estimate Values.**

**Read and study pages: 191 -195**

**Give special attention to: the vocabulary terms: interpolation, extrapolation.**

**Basic Assignment: Check: Q's 4-7**

**Apply: Q's 8-10, 13**

**Challenge Assignment: Q's 11, 12 and 14, 15.**

**Study Guide, page 200**

**Chapter Review, page 201-203.**

**Lastly, take the Practice Test on Page 204. Score your test and give yourself a per cent. \_\_\_\_\_%. Did you do better than you did last time?**