**2023 Foundations of Mathematics 12**

**Teacher: Mr. Schroeder Resource: Foundations of Mathematics 12 (Nelson)**

*Chapter 4 – PERMUTATIONS AND COMBINATIONS*

4.1 Counting Principles

4.2 Introducing Permutations and Factorial Notation

4.3 Permutations When All Objects are Distinguishable

4.4 Permutations When Objects are Identical

4.6 Combinations

4.7 Solving Counting Problems

*Chapter 5 - PROBABILITY*

5.2 Probability and Odds

5.3 Probabilities Using Counting Methods

5.4 Mutually Exclusive Events

5.5 Conditional Probability

5.6 Independent Events

*Chapter 1 – Financial Mathematics Investing Money*

1.1 Simple Interest

1.3 Compound Interest: Future Value

1.4 Compound Interest: Present Value

1.5 Investments Involving Regular Payments

1.6 Solving Investment Portfolio Problems

*Chapter 2 – Financial Mathematics: Borrowing Money*

2.1 Analyzing Loans

2.3 Solving Problems Involving Credit

2.4 Buy, Rent, Or Lease?

*Chapter 6 – Polynomial Functions*

6.1 Exploring the Graphs of Polynomial Functions

6.2 Characteristics of the Equations of Polynomial Functions

6.3 Modelling Data with a Line of Best Fit

6.4 Modelling Data with a Curve of Best Fit

*Chapter 7 – Exponential and Logarithmic Functions*

7.2 Relating the Characteristics of an Exponential Function to Its Equation

7.3 Modelling Data Using Exponential Functions

7.4 Characteristics of Logarithmic Functions with Base 10 and Base *e*

7.5 Modelling Data Using Logarithmic Functions

*Chapter 8 – Sinusoidal Functions*

8.1 Understanding Angles

8.2 Exploring Graphs of Periodic Functions

8.3 The Graphs of Sinusoidal Functions

8.4 The Equations of Sinusoidal Functions

8.5 Modelling Data with Sinusoidal Functions

Final Exam June 8,9, 12-14