**Workplace Math 11- Final Examination Study Guide**

**Exam Date: Wednesday, June 9th, 1 pm Room 206**

**What you can have:**

* Calculator
* Formula sheet provided
* Your own cheat sheet

-This may be up to 7 pages (one per unit). Use the study guide to go back through unit booklets, and write or type any information or examples to help you. DO NOT DO THIS WITHOUT REFERENCING THE STUDY GUIDE. Not every concept will be on the exam!

-no photocopies of notes or pictures allowed. It must be written or typed.

**Time allowed: 2 hours**

**Exam format: Multiple choice and long-answer questions.**

**Unit 1- 7 marks**

* Be able to read, analyze, and answer questions about various graphs
* No drawing of graphs (but still know how a circle graph is constructed)
* What can make a graph misleading/how a graph is misleading
* Percentage calculations (of a number, what percent is blank of blank, etc.)

**Unit 2- 9 marks**

* Types of income and expenses, and examples of each (variable and variable income; fixed, variable and unexpected expenses)- see assignment 6
* Types of bank accounts- know various things a bank can charge you extra for- see pg. 5/6 of booklet
* How to calculate bank transaction costs- see assignment 2
* Create a **realistic budget** (where you over-estimate income and under-estimate variable expenses)- see pg. 25, 27

**Unit 3- 9 marks**

* Calculating monthly credit card payments as a percentage
* Understand and be able to use both compound and simple interest formulas (given on formula sheet)
* Know that the total value of an investment, A, is made up of P + I (see page 12)
* Know when to use different variations of the I=prt formula, depending on what the question is asking you for (also on formula sheet) for both loan and investment questions
* Rule of 72- remember to keep rate as a percentage!
* Using the Personal Loan Calculator (Assignment 8)

**Unit 4- 8 marks**

* Pythagorean theorem to solve for unknown side (a, b, or c)
* Using the trigonometric ratios (sinθ, cosθ, tanθ) to solve for an unknown side or angle

\*\*remember to use 2nd function (inverse) when finding an ANGLE!

* Angle of elevation and depression- how to label on a diagram or draw for a given word problem (Assignment 5)
* Word problems- be able to draw a diagram and solve (Assignment 6)
* Multi-step calculations (Assignment 8)

**Unit 5- 9 marks**

* Knowing if a slope is positive, negative, 0, or undefined (Assignment 11)
* Being able to calculate the slope given the rise and run, or from a graph
* Being able to calculate the rise or run when given the other and the slope
* Percent Grade
* Independent vs. Dependent variables (Assignment 13)
* Being able to draw a line with a given slope and point to plot (Assignment 11 #3)

**Unit 6- 7 marks**

* Scale factors (Assignment 2)
* Different views of objects (Assignment 3)
* Component Parts (Assignment 4)

**Unit 7- 5 marks**

* Mean, median, mode and range- definitions and how to calculate
* Theoretical Probability as both fractions and percentage