SIT190

Introduction to Functions, Relations and Graphs

This will be the cover of your portfolio…make it nicer than this! Include unit name, your name, student id…then delete this text!

STUDENT NAME

STUDENT ID

Learning Summary Report

Update header with your name and ID. Then delete this box.

# Self-Assessment Details

The following checklists provide an overview of my self-assessment for this unit.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Pass (D) | Credit (C) | Distinction (B) | High Distinction (A) |
| Self-Assessment |  |  |  | ✓ |

Self-Assessment Statement

# Declaration

I declare that this portfolio is my individual work. I have not copied from any other student’s work or from any other source except where due acknowledgment is made explicitly in the text, nor has any part of this submission been written for me by another person.

Signature: **Ethan Cowlishaw**

# Portfolio Overview

Start with something like “This portfolio includes work that demonstrates that I have achieve all Unit Learning Outcomes for SIT190 Unit Title to a **Pass** level.”

Describe your learning journey – where did you start, what did you learn, where will this take you? Note significant milestones or hurdles you overcame

Provide a justification for why you should receive the above grade… Write this for the assessment panel – tell them why you should get this grade.

* For Pass: you need to indicate how you have demonstrated all Unit Learning Outcomes to an acceptable level.
* For Credit: you need to indicate how you have demonstrated all Unit Learning Outcomes to a good level.
* For Distinction: you need to indicate how you have been able to apply all of the Unit Learning Outcomes in achieving the distinction tasks.
* For High Distinction: you need to indicate how you have been able to extend beyond the material presented in the unit.

In this section, refer to the tasks you have completed. These will be attached by OnTrack after this summary. Do not try to demonstrate the outcomes here, this is just a summary.

Think of this like a cover letter to a job application. The unit learning outcomes are the job’s selection criteria. Your tasks provide the evidence of how you have met these criteria.

I believe I deserve a high distinction.

I started from a mathematical desert where I felt incompetent and unable to perform mathemathics past basic algebra. I struggled to understand how to apply rudimentary principles like BODMAS as it felt contradictory to me in the way it was applied.

Learning to move past negative feelings I had in the past about mathematics being impossible for me was perhaps the greatest challenge at the beginning. There were often pervasive moments where I felt like giving up as the problems felt as though they were advancing too fast and to a point way out of my skill level. I was already on my way to shedding old ghosts, so these moments were often fleeting. I had a main goal of wanting to do the absolute best I could in the face of complete confusion. I knew I had to do the best I could as I have hobbies and career goals that require more complex mathematics than algebra. My goal was enough of a driving force to push me to go beyond what I thought I was capable of and proved to me that given enough commitment to difficult problems, a solution can be found both in a literal sense and in a metaphorical sense.

Through my study, I have collated theory and practical class-based experience into a useful tool (Obsidian.md) that I will be able to physically reference and utilise in real-life problems I have encountered. Already I have been able to apply my new knowledge in game development to find the displacement of a projectile. I had to find three variables of an object: the displacement and the acceleration given only a velocity of v=5x. For this, I required differentiation to find the acceleration and integration to find the displacement. (Figure out how to word this better)

of how to perform complex algebra operations

\*DRAFT\*

# Reflections

## What was your chosen persona: Magi, Knight, Squire or Page?

Reflect on your learning in this unit with respect to the attributes of your goal persona:

* Independence
* Resourcefulness
* Collaboration

## The most important things I learnt:

Think about what you have learnt in this unit and reflect on what you think were key learning points, tasks, activities, etc. Did you learn what you wanted/expected to learn?

The main goal of enrolling in this unit was to improve at mathematics. More specifically, I wanted to understand trigonometry better and to begin my journey to understanding calculus. I strongly believe I achieved that target as I have a increasingly in-depth knowledge of mathematics where I improve each day, I understand trigonometry better, calculus is a tool I am excited to use more, and I have passed all my assessments.

## I feel I learnt these topics, concepts, and/or tools really well:

What things are you really confident about now?

I picked up fractions well, meaning I can now do them fast and accurately. I do still struggle to simplify complicated fractions but I can mentally simplify basic fractions with ease.

I understand matrices to a relatively high degree where I believe I could perform large operations if given enough time.

I am confident in integrating and differentiating in calculus but I do not fully understand the theory behind either.

## I found the following topics particularly challenging:

What was the most challenging part of the unit? Have you mastered those ideas, concepts, or skills now? What did you learn about yourself in how you dealt with these challenges?

By far the most challenging moments was during learning logarithms. I could look at them for long periods of time and struggle to understand how the outputs of logarithms connected to exponents. This led to hours of frustration over not being able to swap them back and forth without excessive amounts of time spent on trying to do so.

I now understand how logarithms and exponents relate to each other. I can not say I have mastered them as I still need more time than is seemingly necessary to convert them but I definitely have grown stronger in them.

Through my struggles with logarithms, I learnt that sometimes letting the problem go for the day is necessary. Trying the best you can for every moment of a problem is feasible only until the exhaustion kicks in. I found a rest, usually sleeping, helps greatly understanding problems better the next day.

## I found the following topics particularly interesting:

What was the most interesting or valuable thing you learnt from this unit? This could be related to the unit concepts, or general things you learnt about yourself.

## I still need to work on the following areas:

University is about developing lifelong learning skills. Given what you have achieved already, what is the next step for you? How will you build upon what you learnt in this unit? This could be related to the unit concepts and skills, or to personal traits you identified as needing further development.

## The things that helped me most were:

What were the most helpful/useful resources? How did they assist you with your learning?

## My progress in this unit was …:

Include a screenshot of your **progress graph** from **OnTrack**, and comment on what happened from your perspective… what does the graph say about how you approached the unit?

A graph of a graph

Description automatically generated with medium confidence

From the graph you can see that I followed the target line fairly closely. This is evidence that I cared strongly about the deadlines given by OnTrack and committed to completing my work to a high degree.

## If I did this unit again, I would do the following things differently:

Looking back, what is it that you think you could have done differently to help you achieve the most you could in this unit (both in terms of the unit concepts and skills, and in terms of personal growth). How will you approach learning in the future?

## Other…:

Adjust this heading to add any other reflections you think help you demonstrate what you got out of this unit, and how it has or will help shape you as an IT Professional.