

# An Expression on the Beauty of Mathematics

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## 1 Introduction

This document aims to offer a glimpse into the independent math work I do in my free time as unfortunately, I do not believe the Activities section on the WISE application offers me enough space to do that. In this document, prove that every positive even power of 2 is one more than a multiple of 3 and every positive odd power of 2 is one less than a multiple of 3 using induction.

## 2 Observations and