Rational functions (AA HL 2.13) (Linear over quadratic)
Title: The Water Slide - Understanding Rational Functions (Linear over Quadratic)

Concept: Rational Functions (Specifically Linear over Quadratic)

Intuition Pump: Think of a water slide where the shape and steepness of the slide are defined by a rational function with a linear polynomial (straight line) in the numerator and a quadratic polynomial (curve) in the denominator.

Visual Analogy:
Slide Design: The linear numerator represents the initial angle or inclination of the slide—simple and straight. The quadratic denominator shapes the curvature and complexity of the slide, influencing how the water flows. As the curve gets steeper (denominator approaches zero), the water flow becomes erratic and potentially shoots off, akin to approaching an asymptote.