## Math and Literature for Intermediate and Secondary

Stories Worth Exploring

365 Penguins - Jean Luc Fromental
Appropriate for Grades 1-8

## Mathematical Focus: Number Sense

Potential explorations of:

- Multiplication (associative \& distributive properties)
- Factors and divisibility

- Triangular numbers, square numbers, cubic numbers
- Relationships within the calendar (days, weeks, months, years)

Two of Everything - Lily Toy Hong
Appropriate for Grades 1-10

Mathematical Focus: Number Sense, Algebra Potential explorations of:

- Doubling and halving

- Multiplicative reasoning (from skip counting to multiples)
- Input/Output machines (relationships in tables)
- Generalizing relations (from a table to an expression)
- Describing and graphing linear relations
- Slope and rate of change

Minnie's Diner - Dayle Ann Dodds
Appropriate for Grades 2-10

Mathematical Focus: Number Sense, Algebra Potential explorations of:

- Doubling and repeated doubling
- Multiplicative reasoning (exploring growth)

- Powers (base 2)
- Generalizing exponential growth (2n)

See also: The Kings Chessboard by David Birch

The Lion's Share - Matthew McElligott
Appropriate for Grades 4-10

## Mathematical Focus: Number Sense, Algebra

Potential explorations of:

- Halving and repeated halving
- Multiplication of fractions

- Negative exponents
- Exploring the inverse of exponential growth (2-n or $1 / 2^{n}$ )

Sir Cumference - Cindy Neuchwander
Appropriate for Grades 6-9

## Mathematical Focus: Space and Shape, Measurement

 Potential explorations of:- Ratio and proportionality
- The derivation or $\pi$

- Relationships between circumference, radius and diameter
- Circles and circle properties
- Decimal equivalents for common fractions

See also:
Sir Cumference and the Isle of Immeter by Cindy Neuchwander (area)

