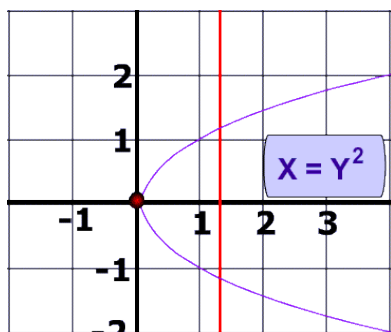


Goals

This fortnight:

- Linear functions and modelling
- Describing functions and relations
- Learn to use your ClassPad calculator



Theoretical Components

Make notes on the following chapters and websites:

- 1A Solving linear equations and inequations
- 1B Rearrangement and substitution
- 1C Gradient of a straight line
- 1D Sketching linear functions
- 1F Finding the equation of a straight line
- 1G Distance between two points and midpoint of a segment
- 1H Linear modelling
- 4C Domain and range
- 4D Types of relations (including functions)

Linear modelling:

- <http://zonalandeducation.com/mmts/functionInstitute/linearFunctions/linearFunctions.html>
- <https://www.mathsisfun.com/algebra/linear-equations.html>
- <https://www.mathsisfun.com/gradient.html>
- https://www.mathsisfun.com/data/straight_line_graph.html
- <https://www.mathsisfun.com/algebra/line-equation-point-slope.html>
- <https://www.mathsisfun.com/algebra/linear-equations.html>

Functions:

- <https://www.purplemath.com/modules/fcns.htm>
- <https://www.mathsisfun.com/sets/function.html>
- <https://www.mathsisfun.com/sets/domain-range-codomain.html>
- <https://www.mathsisfun.com/sets/functions-common.html>
- <https://www.mathsisfun.com/algebra/functions-odd-even.html>

Practical Components

Do the following questions:

Organise your solutions neatly in your exercise book.

You will require Chapter 1 and 4 of Maths Quest 11 Mathematical Methods (pdf – Google Classroom)

- Ex 1A: 3
- Ex 1B: 3, 5
- Ex 1C: 1a, 2c, 3e, 7, 8
- Ex 1D: 8e, 9c, f, 14, 15
- Ex 1F: 5a, b, 8, 10, 12-15
- Ex 1G: 1, 5
- Ex 1H: All even numbered questions
- Ex 4C: 1b, g, 2d, h, 3c, 7, 10
- Ex 4D: 1a, d, g, j, 2a, d, g, j, 4

Mathspace Tasks

Investigation

See next page

QFO

Quiz/Forum/Other

Complete the two Mathspace tasks.

Week 6/7 Investigation

This year Ann's age is the sum of the digits of her maths teacher's age. In five years, Ann's age will be the product of the digits of her maths teacher's age at that time.

What is the age difference between Ann and her teacher?

Develop an algebraic rule to solve this situation.