Problem Solving-Level 3 Digit Detail

Problem One

2 2

The digits on this letter box add to 16.

What other two- and three-digit house numbers can you think of in which the digits add to 16?

Problem Two

A New Zealand coin can be swapped for four New Zealand coins that have the same total value as this coin.

What might this coin be?



Problem Three

A pentagon has five sides, five corners, and five diagonals. Is there any other shape with the same number of diagonals as sides and corners?

Explain your answer.

Problem Four

Digits appear like this on some digital displays:

0123455789

- a. How many lines of symmetry does each digit have?
- b. Which two digits are mirror images of each other?
- c. Which digits have rotational symmetry?



Problem Five

a. How many squares of different sizes can be made with a rubber band on this geoboard? The pins must be on the corners of each square.

b. How many different-sized squares could you make on a 16-pin geoboard?

Applying problem-solving strategies