## **Problem One**

Five and six are consecutive numbers, and so are 13 and 14. Which pairs of consecutive numbers:

Stretching

Exercises

- a. add up to 373?
- **b**. multiply together to give 306?
- c. give an answer of 1.1 when the larger is divided by the smaller?

## Problem Two

On 1 October, David has 48 lollies in his jar and Joanna has 33 lollies in her jar. Every day after that, David eats three of his lollies and Joanna eats two of her lollies.

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On what date do they have the same number of lollies left?

## **Problem Three**

Nicole made this shape on a geoboard with a rubber band.

- a. What is the area of this shape?
- b. How many pegs touch the rubber band?
- c. How many pegs are inside the shape?
- d. Draw three other shapes that have the rubber band going around eight pegs with two pegs inside the shape. Find the areas of these three shapes. What do you notice?

## **Problem Four**

The only keys that work on Pere's calculator are:



- a. How could Pere get 6 in the window?
- **b.** How could he get 8 in the window with no more than seven presses?

Applying problem-solving strategies