Fencing a Garden

**Patterning and Algebra**

**Unit 1 Line Master 5a**

This graph shows the relationship between the side length
of a square garden and the perimeter.



|  |  |
| --- | --- |
| ***x*** | ***y*** |
| 0 |  |
| 1 |  |
| 2 |  |
| 3 |  |
| 4 |  |

 1. a) Complete the table of values
 for the relationship.

 b) What does *x* represent?

 c) What does *y* represent?

 Fencing a Garden (cont’d)

**Patterning and Algebra**

**Unit 1 Line Master 5b**

2. Why are the points on the graph joined by a line?

3. Write an equation to describe the relationship in the graph
 and table.

4. How much fencing material would a person need to fence
 a square garden with sides 6 m long?
 How did you determine your answer?

 Fencing a Garden (cont’d)

**Patterning and Algebra**

**Unit 1 Line Master 5c**

5. Suppose a person has 14 m of fencing.
 What is the side length of the largest square garden
 they could enclose if the side length does not need
 to be a whole number of metres?
 How did you determine your answer?