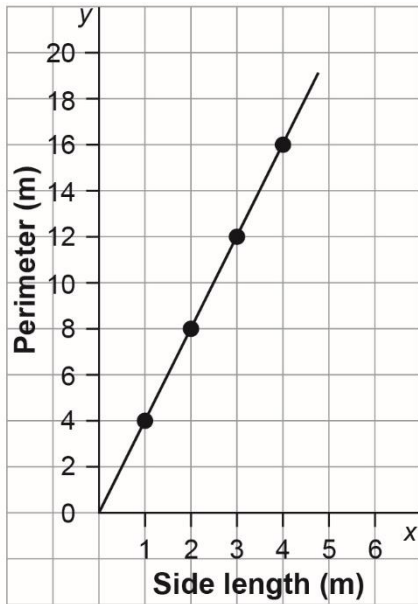


## Fencing a Garden

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



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

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

b) What does  $x$  represent?

c) What does  $y$  represent?

Name \_\_\_\_\_ Date \_\_\_\_\_

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## Fencing a Garden (cont'd)

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?

Name \_\_\_\_\_ Date \_\_\_\_\_

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## Fencing a Garden (cont'd)

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?