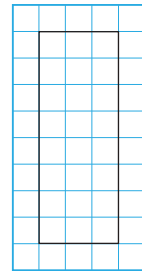


3. a) Draw this rectangle on grid paper.  
Draw 3 different rectangles with the same area as this rectangle.



- b) Calculate the perimeter of each rectangle.  
Write the perimeter inside each rectangle.
- c) Cut out the rectangles. Sort them from least to greatest perimeter.
- d) Describe how the rectangles change as the perimeter increases.

$$P = 2\ell + 2w$$

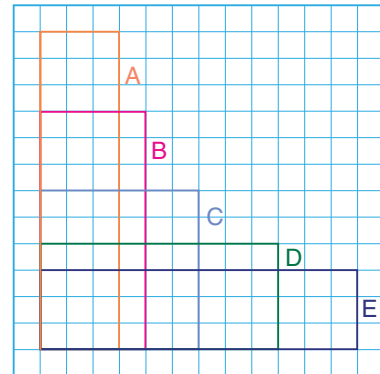
#### 4. Assessment Focus

- a) Draw a square on grid paper.  
Determine its area and perimeter.
- b) Draw a rectangle with the same perimeter but a different area.
- c) Which figure has the greater area? Show your work.

5. This diagram shows overlapping rectangles drawn on 1-cm grid paper.

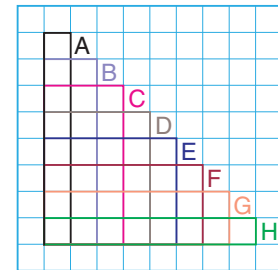
All of them share the same vertex.

- a) Calculate the area of each rectangle.  
What do you notice?
- b) Which rectangle do you think has the least perimeter?  
The greatest perimeter? Justify your choice.
- c) Calculate the perimeter of each rectangle.  
Were you correct in part b? Explain.



6. This diagram shows overlapping rectangles drawn on 1-cm grid paper. All of them share the same vertex.

- a) Calculate the perimeter of each rectangle.  
What do you notice?
- b) Which rectangle do you think has the least area?  
The greatest area? Justify your choice.
- c) Calculate the area of each rectangle.  
Were you correct in part b? Explain.



7. **Take It Further** Can two different rectangles have the same perimeter and the same area? Justify your answer.

### In Your Own Words

Explain how rectangles can have the same perimeter but different areas.  
Explain how rectangles can have the same area but different perimeters.  
Include diagrams in your explanations.