Student Worksheet 1
TI-15 Explorer™: Area and Perimeter

W1

Name:

Part 1 (For a worked example go to slide 9 in PowerPoint)

Use your TI-15 Explorer™ calculator to find the smallest possible and the largest possible perimeter for the following rectangles: (use only integers)

1. Rectangle with an area of 16 cm^2

   i) Smallest perimeter _____

   ii) Largest perimeter _____

2. Rectangle with an area of 18 cm^2

   i) Smallest perimeter _____

   ii) Largest perimeter _____

3. Rectangle with an area of 20 cm^2

   i) Smallest perimeter _____

   ii) Largest perimeter _____

4. Rectangle with an area of 28 cm^2

   i) Smallest perimeter _____

   ii) Largest perimeter _____

5. Rectangle with an area of 36 cm^2

   i) Smallest perimeter _____

   ii) Largest perimeter _____

6. What do you notice about the shapes of the rectangles with the smallest perimeters?

_____

_____

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Part 2 (For a worked example go to slide 10 in PowerPoint)

Use your TI-15 Explorer™ calculator to find the smallest possible and the largest possible area for the following rectangles: (use only integers)

1. Rectangle with a perimeter of 16 cm
   - i) Smallest area _____
   - ii) Largest area _____
2. Rectangle with a perimeter of 20 cm
   - i) Smallest area _____
   - ii) Largest area _____
3. Rectangle with a perimeter of 28 cm
   - i) Smallest area _____
   - ii) Largest area _____
4. Rectangle with a perimeter of 36 cm
   - i) Smallest area _____
   - ii) Largest area _____
5. Rectangle with a perimeter of 40 cm
   - i) Smallest area _____
   - ii) Largest area _____
6. What do you notice about the shapes of the rectangles with the largest areas?

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