## Example 1:

## Example 2:

| Scale | Perimeter Ratio | Area Ratio |
| :---: | :---: | :---: |
| $1: 3$ |  |  |
| $1: 5$ |  |  |
| $2: 5$ |  |  |
|  | $3: 4$ |  |
|  |  | $25: 49$ |
| a:b |  |  |

Example 3:

## Example 4:

## Practice

1. What happens to the area and perimeter of a rectangle with length 8 units and width 5 units when its dimensions are increased by a factor of 4 ?
2. What would the area of a rectangle that is $10 \times 9$ units be if I decrease the dimensions by 3 units?
3. Using the two triangles below, what is the scale factor? What is the perimeter ratio? What is the area ratio?

4. The large rectangular baking pan has an area of 150 sq inches and a width of 10 inches. A smaller pan is similar to the first and has an area of 96 sq inches. Find the width of the smaller pan.
