Geometric Ratios

Prepared by Alex Katsenelenbogen

- 1. The ratio between the areas of two squares is 25:16. If the area of the larger one is 200, what is the perimeter of the smaller one?
- 2. The ratio between the circumferences of two circles is 4:3. What is the ratio between their areas?
- 3. The ratio between two sides of a rectangle are 9:4. If the perimeter of the rectangle is 130, what are the sides of this rectangle?
- 4. The ratio between two sides of an isosceles triangle is 3:5. if the angle across from the longest side is $100 \deg$, and the area of the triangle is $40 \operatorname{cm}^2$, what are the side lengths of the triangle?
- 5. The ratio between the two legs of a right triangle is 3:2. If the perimeter of this triangle is 200, how long is the hypotenuse?