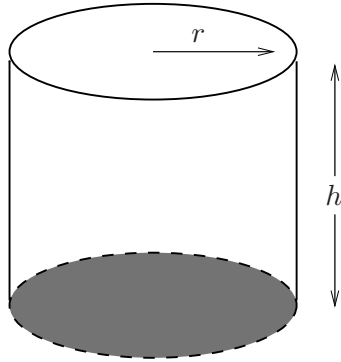
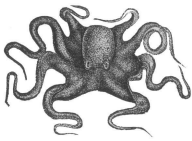


4. (12 points) The zoo has decided to make the new octopus tank spectacular. It will be cylindrical with a round base and top. The sides will be made of Plexiglas which costs \$65.00 per square meter, and the materials for the top and bottom of the tank cost \$50.00 per square meter. If the tank must hold 45 cubic meters of water, what dimensions will minimize the cost, and what is the minimum cost?



radius \_\_\_\_\_

height \_\_\_\_\_

cost \_\_\_\_\_