

# Math 1513 - College Algebra

## Written Assignment 4 - Due 2016.09.11

---

Directions: Please answer the following question in complete sentences. Be sure to label all geometric objects in any illustrations. I will accept an answer in a scanned image format, as a pdf, or sent from your awesome picture phone.

Problem: The surface area  $SA$  of a cylinder is given by the formula  $SA = 2\pi r^2 + 2\pi r h$ , where  $h$  is the height of the cylinder and  $r$  is the radius of the base. Find the height of a cylinder that has a radius of 12 cm and a surface area of 1400 cm<sup>2</sup>.