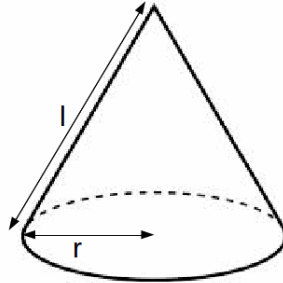
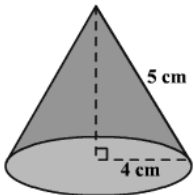


Surface Area Cones

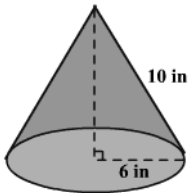


The **surface area** of cone is given by the formula $SA = \pi r^2 + \pi r l$. r is the radius and l is the **slant height**. The formula consists of two parts. It is a **circle** plus the **lateral area** of the cone (the cone without the top circle). Try the following. If rounding is not specified assume to the **nearest 10th**.

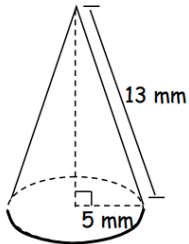
1. Find the surface area of the cone to the **nearest 10th**.



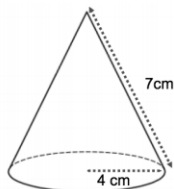
2. Find the surface area of the cone in terms of π .



3. Find the surface area of the cone to the **nearest 10th**.



4. Find the surface area of the cone in terms of π .



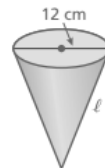
5. Find the missing slant height l .

$$S = 33\pi \text{ in.}^2$$



6. Find the missing slant height l .

$$S = 126\pi \text{ cm}^2$$



7.

PAPER CUP A paper cup shaped like a cone has a diameter of 6 centimeters and a slant height of 7.5 centimeters. How much paper is needed to make the cup?

8. The lateral area of a cone is 48π . The radius of the base is 12. Find the slant height.