

Surface Area Word Problems:

Name: _____

1.) A cosmetics company that makes small cylindrical bars of soap wraps the bars in plastic prior to shipping. Find the surface area of a bar of soap if the diameter is 5 cm and the height is 2 cm. Use 3.14 for π .

2.) Chloe wants to wrap a present in a box for Sarah. The top and bottom of the box is 8 in. by 3 in., the sides are both 3 in. by 2 in. and the front and back are 8 in. by 2 in. How much wrapping paper will Chloe need to wrap the present?

3.) The lateral area of a cylinder is 94.2 cm^2 . The height is 6 cm. What is the radius?

4.) Tara made a rectangular fence around her rose so it would not get hurt by her dog. She put a fence around the rose that was 4 ft long, 2 ft wide, and 3 ft high. How much material did she use to make her fence?

5.) A company is deciding which box to use for their merchandise. The first box measures 8 inches by 6.25 inches by 10.5 inches. The second box measures 9 inches by 5.5 inches by 11.75 inches. Which box required more material to make?

6.) If each box (from #5) used material that cost \$0.03 per square inch to make, how much does a company save by choosing to make fifty boxes of the smaller box in comparison to fifty boxes of the larger box?