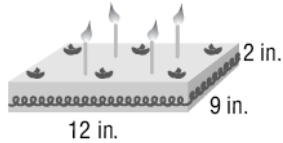


Problem Solving #1 - Surface Area of Prisms and Cylinders

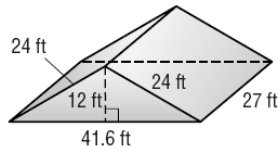
1. **BAKING** The top and sides of the cake shown below are to be covered in frosting. Calculate the area that will be covered with frosting.



2. **GIFTS** A birthday gift is placed inside the box shown below. What is the minimum amount of wrapping paper needed to wrap this gift?

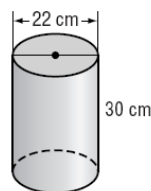


3. **FARMING** Phil is planning to shingle the roof on his barn shown below. How many square feet will he be shingling?

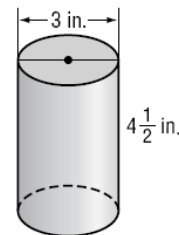


4. **FARMING** Refer to Exercise 3. If one package of shingles covers 325 square feet, how many packages will Phil need to buy?

5. **LIGHT SHOW** A mirrored cylinder used in a light show is shown below. Only the curved side of the cylinder is covered with mirrors. Find the area of the cylinder covered in mirrors. Round to the nearest tenth.



6. **SOUP** Emily has the flu, so she decides to make chicken noodle soup. How many square inches of metal were used to make Emily's can of soup? Round to the nearest tenth.



7. A rectangular sofa cushion is 36 inches by 30 inches by 20 inches. How many cushions can be covered with 38,400 square inches of material?

8. Louise is covering a rectangular shaped pillow with new fabric. If the fabric costs \$0.12 per square inch, how much money will Louise spend on the fabric? (The pillow's dimensions are 8 in. by 6 in. by 4 in.)