11-3 Solve It!

Think about what dimensions you need and how to get them from what you already know.
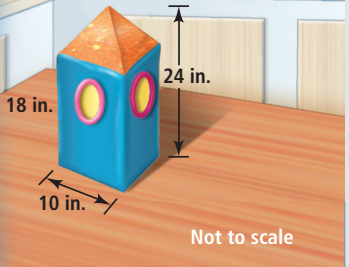
You are building a model of a clock tower. You have already constructed the basic structure of the tower at the right. Now you want to paint the roof. How much area does the paint need to cover? Give your answer in square inches. Explain your method.
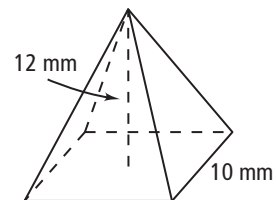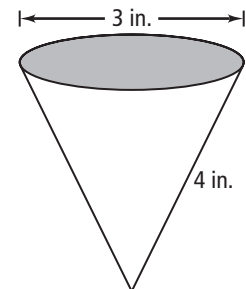
24 in.
18 in.
10 in.

Not to scale

11-3 Lesson Quiz

1. What is the surface area of a square pyramid with a height of 12 mm and a base that measures 10 mm on each side? Round to the nearest tenth if necessary.

12 mm
10 mm

2. Do you UNDERSTAND? How much paper is needed to make the drinking cup at the right? Round to the nearest square inch.

3 in.
4 in.

3. To the nearest square inch, what is the surface area of the cone in Question 2?

Answers

Solve It!

About 156.2 in.^{2}; explanations may vary. Sample: The roof consists of 4 congruent triangles with base 10 in. and height $\sqrt{61}$ in. Find the area of one triangle and multiply by 4.

Lesson Quiz

1. 360 mm^2
2. about 19 in.^{2}
3. 26 in.^{2}