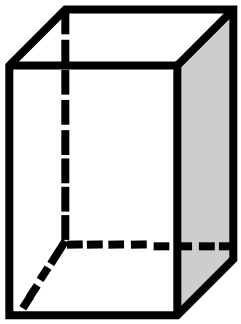
Name _____ Date _____

2D and 3D Area, Volume and Surface Area - Step-by-Step Lesson

Ron wrapped a box he had with wrapping paper for his friend's birthday. The wrapping paper was three cents per square inch. How much will the paper cost for the box below?

h = 11 inches

w = 5 inches



l = 9 inches

Explanation:

We need to determine the surface area of the box.

The surface area can be found by using the dimensions of each face to find the area. Since all opposite sides of the box have the same surface area, we can just multiply those areas by 2 to calculate the surface area of both sides:

Front: 9 in. x 11 in. = 99 in^2 x 2 = 198 in^2
Top: 5 in. x 9 in. = 45 in^2 x 2 = 90 in^2
Side: 5 in. x 11 in. = 55 in^2 x 2 = 110 in^2

The surface area is the sum of these areas, or 398 in^2.

If each square inch of paper cost $0.03, the cost would be: (398 x $0.03).

So Ron needs to spend $11.94 on paper.