Formulas for Volume

Solve.

1. What is different about the formula to find the volume of a cube and the formula to find the volume of a rectangular prism?

2. What is similar about the formulas to find the volume of a cube and a rectangular prism?

3. Nate installs 324 square feet of carpet in a house. The room is 18 feet long and 9 feet high. What is the volume of the room?

4. Students determined the area of their classroom to be about 50 square meters. Determine the length and the volume of the room if it is 5 meters wide and 3 meters high.

5. A cube has 10 cm edges. How much wrapping paper is needed to completely cover the cube?

6. Todd built the cube below out of smaller cubes and painted the outside of it red. After the paint dried, he broke the cube apart into the original 8 smaller cubes. How many faces of the smaller cubes are NOT painted red?