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Homework: Similar Ratios Mr. Lynch

**Complete each of the following:**

1) The lengths of two similar rectangles are 28cm and 35cm. What is the ratio of the corresponding side lengths? the areas? the volumes?

2) Two trapezoids have areas 500cm2 and 320cm2. Find their ratio of similarity.

3) The area of a regular octagon is 35cm2. What is the area of a regular octagon with sides four times as large?

4) The ratio of the volumes of two cubes is 8:27. What is the ratio of their surface area?

5) The ratio of the volumes of two similar solids is 64:729. Which of the following could be surface areas of the solids?

a) 32 units2, 162 units2 b) 64 units2, 729 units2

c) 8 units2, 27 units2 d) 4 units2, 9 units2

e) none of these