

Name : \_\_\_\_\_

## Surface Area and Volume

L152

- 1) G and H are regular figures. The scale factor of G to H is 7 : 2. If the volume of figure H is 128 cubic feet, find the volume of figure G.

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- 2) The scale factor of two cubes is 5.5 : 6. Find the surface area of the smaller cube, if the surface area of larger cube is 150 square feet.

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- 3) R and S are similar rectangular prisms. The surface area of R is 150 square feet, and the surface area of S is 100 square feet. Find the scale factor of R to S.

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- 4) The scale factor of two similar rectangular prisms is 1 : 2. The surface area of the larger prism is 12.25 square feet. Find the surface area of the smaller prism.

\_\_\_\_\_

- 5) X and Y are similar triangular pyramids and the scale factor of X to Y is 1 : 9. What will be the volume of X, if the volume of Y is 2,187 cubic inches?

\_\_\_\_\_

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1.3. Determine the volume

ce area of the smaller prism?

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## Answer key

### Surface Area and Volume

L152

- 1) G and H are regular figures. The scale factor of G to H is 7 : 2. If the volume of figure H is 128 cubic feet, find the volume of figure G.

\_\_\_\_\_

**5,488 cubic feet**

- 2) The scale factor of two cubes is 5.5 : 6. Find the surface area of the smaller cube, if the surface area of larger cube is 12.96 square feet.

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- 3) R and S are similar figures. The scale factor of R to S is 2 : 3. If the volume of R is 8 cubic feet, find the volume of S.

1.3. Determine the volume of the larger prism.

- 4) The scale factor of two prisms is 1.25 : 1.5. If the surface area of the larger prism is 12.96 square feet, find the surface area of the smaller prism.

ce area of the smaller prism?

\_\_\_\_\_

**70.56 square feet**

- 5) X and Y are similar triangular pyramids and the scale factor of X to Y is 1 : 9. What will be the volume of X, if the volume of Y is 2,187 cubic inches?

\_\_\_\_\_

**3 cubic inches**