1) What is the scale factor of figure A to figure B?

2) Determine the surface areas of figures A and B.

3) What is the ratio of surface areas of figure A to figure B?

4) Find the volumes of figure A and figure B.

5) What is the ratio of volumes of figure A to figure B?

6) Express the relationship between scale factor and the ratio of surface areas.

7) What is the relation between scale factor and the ratio of volumes?
1) What is the scale factor of figure A to figure B?

4 : 1

2) Determine the surface areas of figures A and B.

960π in² ; 60π in²

3) What is the ratio of surface areas of figure A to figure B?

16 : 1

4) Find the volumes of figure A and figure B.

4,032π in³ ; 63π in³

5) What is the ratio of volumes of figure A to figure B?

64 : 1

6) Express the relationship between scale factor and the ratio of surface areas.

Ratio of surface areas = 16 : 1 = 4² : 1² = (scale factor)²

7) What is the relation between scale factor and the ratio of volumes?

Ratio of volumes = 64 : 1 = 4³ : 1³ = (scale factor)³