



## Multiple Choice

- 1) Find the scale factor of two similar cylinders whose surface areas are in the ratio 16 : 81.
- a) 9 : 4       b) 4 : 9      c) 64 : 729      d) 16 : 81
- 2) (9, 18) is the dilated point of (3, k). Determine the value of k, when the center of dilation is at the origin.
- a) -6       d) 6
- 3) If the lengths of a general shape will be multiplied by a scale factor of  $y$ , then the area of the new shape will be multiplied by \_\_\_\_\_.
- a)  $y^2$       d)  $2y$
- 4) Find the dilated coordinates of a point (10, 25) with a scale factor of 5, centered at the origin and the scale factor is 5.
- a) (-10, -25)      d) (25, 10)
- 5) The volumes of similar solids are in the ratio 8 : 343. Determine the ratio of their surface areas.
- a) 49 : 4      b) 2 : 7      c) 8 : 343       d) 4 : 49
- 6) G and H are similar triangles. The area of G is 64 times larger than the area of H. How much larger are the dimensions of G?
- a) 8 times      b) 16 times      c) 4 times      d) 64 times

