Each pair of figures is similar. Find x and y (SA denotes Surface Area and V denotes Volume).

1) \[ V = 5488\pi \text{ in}^3 \]
   \[ V = 2000\pi \text{ in}^3 \]
   \[ x = \phantom{0} \]
   \[ y = \phantom{0} \]

2) \[ V = 2000\pi \text{ in}^3 \]
   \[ SA = 30 \text{ yd}^2 \]
   \[ SA = 1920 \text{ yd}^2 \]
   \[ x = \phantom{0} \]
   \[ y = \phantom{0} \]

3) \[ V = 256 \text{ ft}^3 \]
   \[ V = 2916 \text{ ft}^3 \]
   \[ SA = 218.75 \text{ in}^2 \]
   \[ SA = 315 \text{ in}^2 \]
   \[ x = \phantom{0} \]
   \[ y = \phantom{0} \]

5) The surface areas of similar triangular pyramids Y and Z are 297 square feet and 132 square feet respectively. The height and the shortest side of pyramid Y is 14 feet and 4 feet respectively. Find the height and the shortest side of Z.

6) The volumes of two similar cones are \(125\pi\) cubic yards and \(5.832\pi\) cubic yards. If the diameter and height of the larger cone are 10 yards and 15 yards respectively, find the diameter and height of the smaller cone.
Each pair of figures is similar. Find x and y (SA denotes Surface Area and V denotes Volume).

1)  
\[ V = 2000\pi \text{ in}^3 \]
\[ V = 5488\pi \text{ in}^3 \]
\[ x = 20 \text{ in} \]

2)  
\[ V = 30 \text{ yd}^2 \]
\[ SA = 1920 \text{ yd}^2 \]
\[ y = 0.5 \text{ yd} \]

3)  
\[ V = 256 \text{ ft}^3 \]
\[ V = 2916 \text{ ft}^3 \]
\[ x = 18 \text{ ft} \]
\[ y = 9 \text{ in} \]

5) The surface areas of similar triangular pyramids Y and Z are 297 square feet and 132 square feet respectively. The height and the shortest side of pyramid Y is 14 feet and 4 feet respectively. Find the height and the shortest side of Z.

6) The volumes of two similar cones are 125\(\pi\) cubic yards and 5.832\(\pi\) cubic yards. If the diameter and height of the larger cone are 10 yards and 15 yards respectively, find the diameter and height of the smaller cone.

The diameter and height of the smaller cone are 3.6 yards and 5.4 yards respectively.