

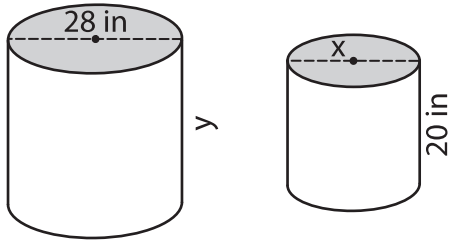
Name : \_\_\_\_\_

## Scale Factor - Finding Sides

Sheet 3

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

1)

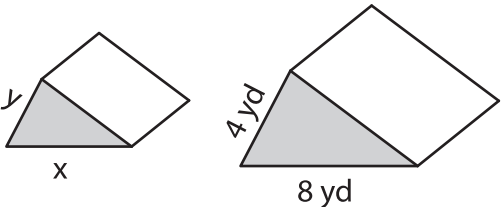


$V = 5488\pi \text{ in}^3$

$x = \underline{\hspace{2cm}}$

$V = 2000\pi \text{ in}^3$

2)

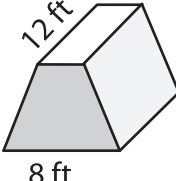


$SA = 30 \text{ yd}^2$

$SA = 1920 \text{ yd}^2$

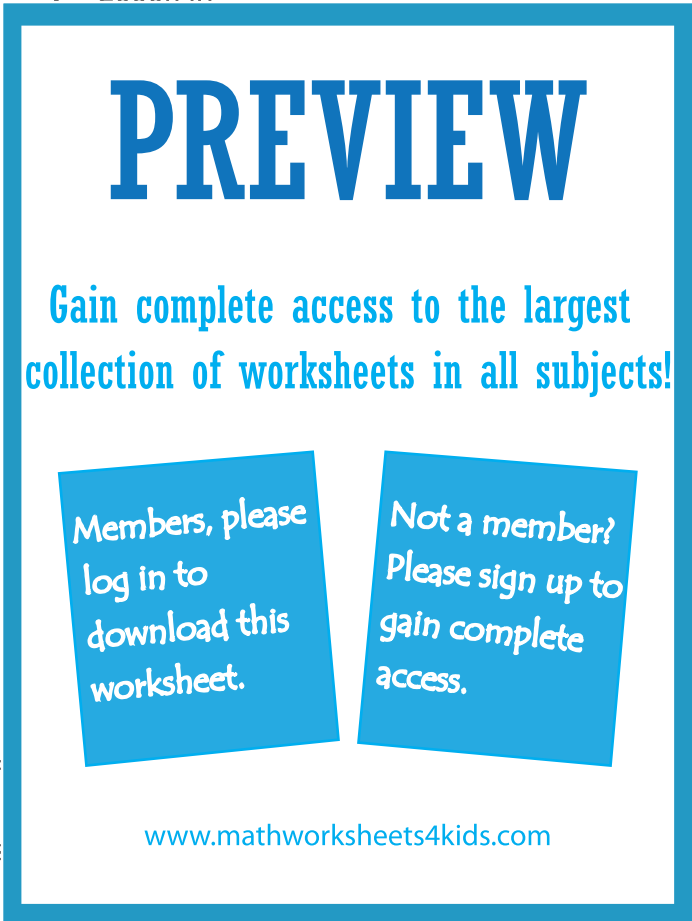
$y = \underline{\hspace{2cm}}$

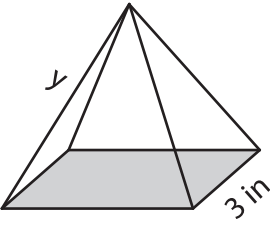
3)



$V = 256 \text{ ft}^3$

$x = \underline{\hspace{2cm}} ;$





$SA = 315 \text{ in}^2$

$y = \underline{\hspace{2cm}}$

5) The surface areas of \_\_\_\_\_ and \_\_\_\_\_ respectively. The height of the larger pyramid is 132 feet and the height of the smaller pyramid is 4 feet respectively. Find the scale factor.

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.