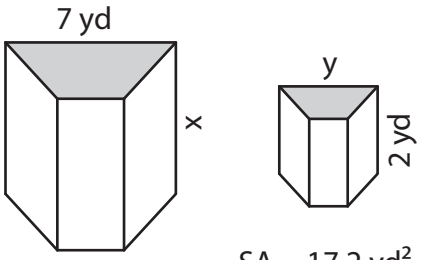
Name : _____

Scale Factor - Finding Sides

Sheet 1

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

1)

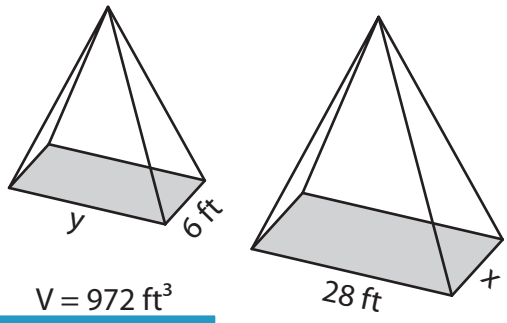


SA = 842.8 yd^2

SA = 17.2 yd^2

x = _____ ;

2)

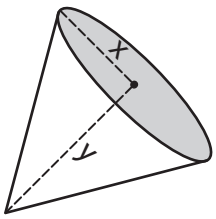


V = 972 ft^3

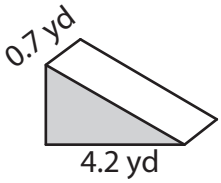
V = 2,304 ft^3

_____ ; y = _____

3)



V = 500π in^3



SA = 8.82 yd^2

x = _____ ;

_____ ; y = _____

5) The volumes of two … d 2,147.466 cubic inches. Find the height and … of the larger prism are 21.3 inches and 7.1 …

_____

6) E and F are similar cylinders with surface areas 192π square feet and 3,888π square feet respectively. If the radius and height of F measures 27 feet and 45 feet, find the radius and height of E.

_____

Name : _____

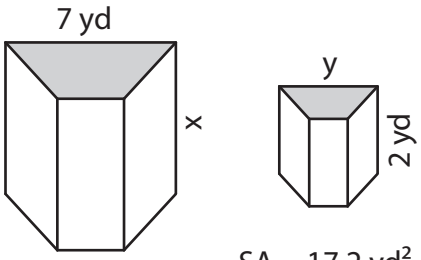
Answer key

Scale Factor - Finding Sides

Sheet 1

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

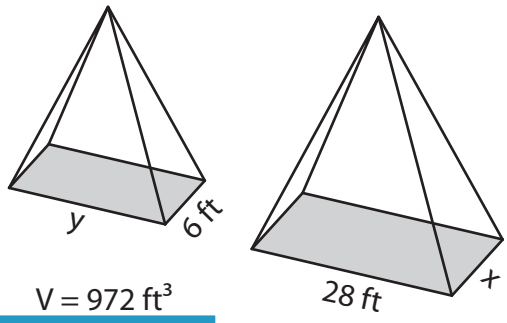
1)



SA = 842.8 yd^2 SA = 17.2 yd^2

x = **14 yd** ;

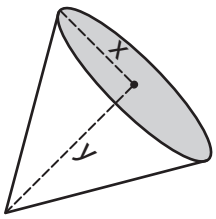
2)



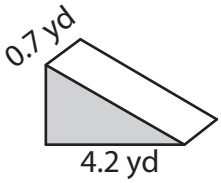
V = 972 ft^3 V = 2,304 ft^3

; y = **21 ft**

3)



V = 500π in^3



SA = 8.82 yd^2

x = **10 in** ;

; y = **4 yd**

5) The volumes of two … d 2,147.466 cubic inches. Find the height and … of the larger prism are 21.3 inches and 7.1 …

The height and length of the smaller prism are 18 inches and 6 inches respectively.

6) E and F are similar cylinders with surface areas 192π square feet and 3,888π square feet respectively. If the radius and height of F measures 27 feet and 45 feet, find the radius and height of E.

The radius and height of cylinder E measures 6 feet and 10 feet.