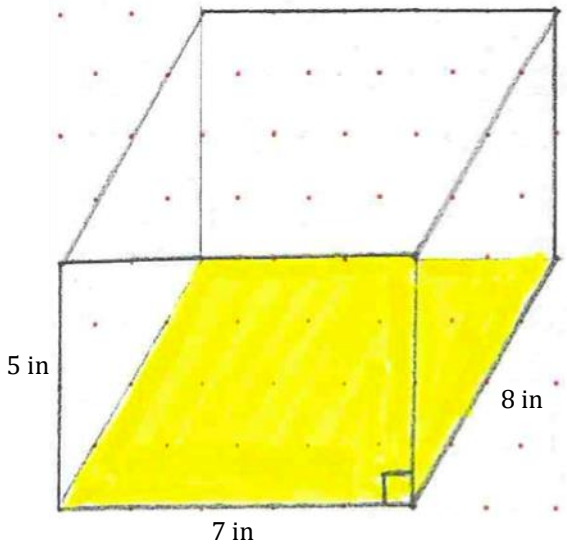
Name: _____

# MATH 1500: Ch 5, 8, & 9 Test

**Find the surface area and volume of the following prisms.**

**1.** Rectangular Prism



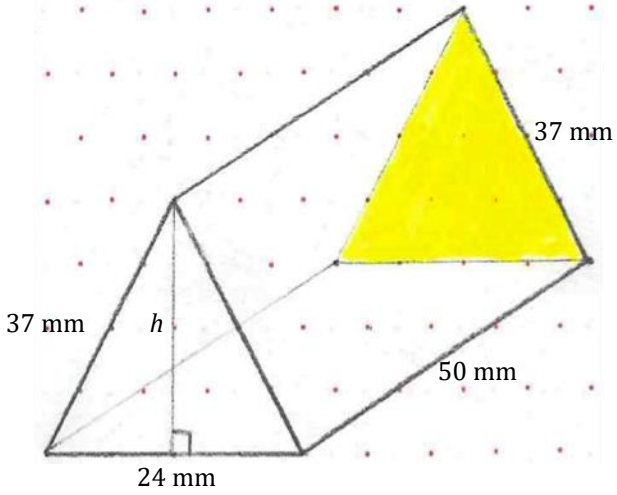

Area of the Base: _____

Volume: _____

Perimeter of Base: _____

Surface Area: _____

**2.** Triangular Prism




Height of Base: _____

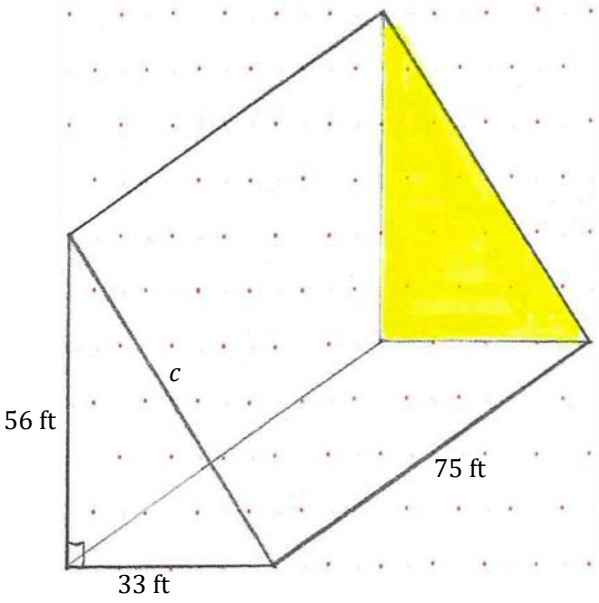
Area of the Base: _____

Volume: _____

Perimeter of Base: _____

Surface Area: _____

**3.** Triangular Prism




Area of the Base: _____

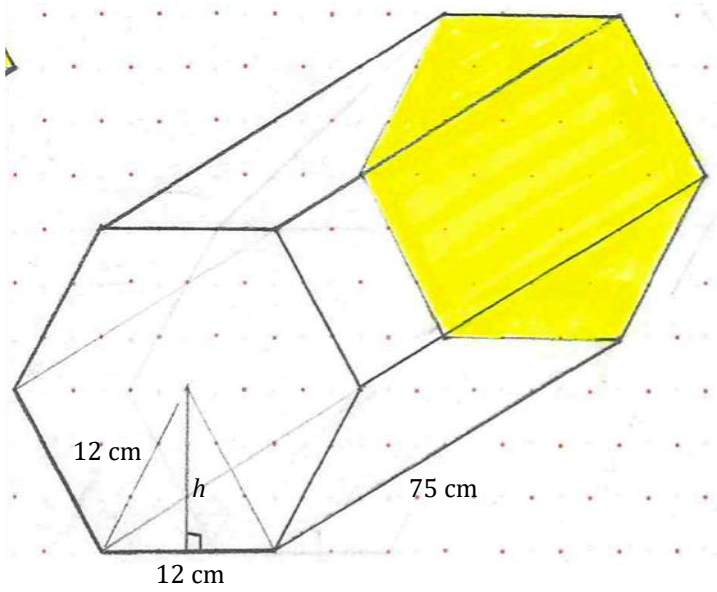
Volume: _____

*c*: _____

Perimeter of Base: _____

Surface Area: _____

**4.** Hexagonal Prism (Base is a regular hexagon.)




*h*: _____

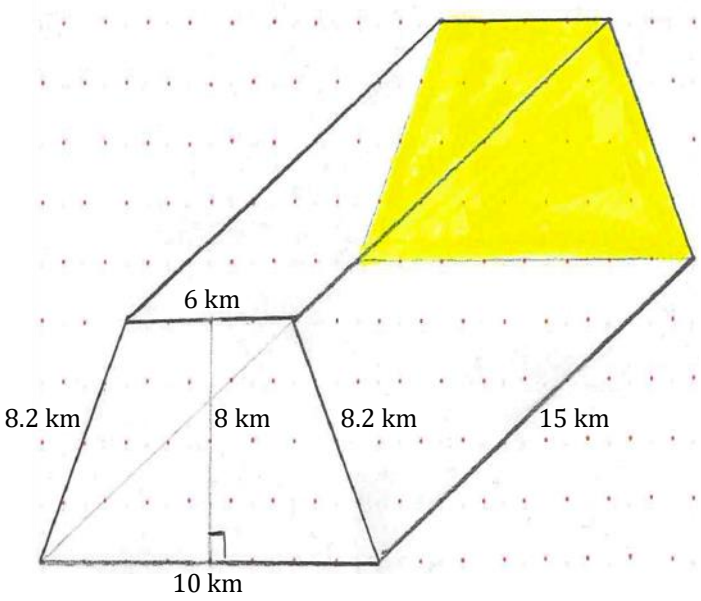
Area of the Base: _____

Volume: _____

Perimeter of Base: _____

Surface Area: _____

**5.** Trapezoidal Prism



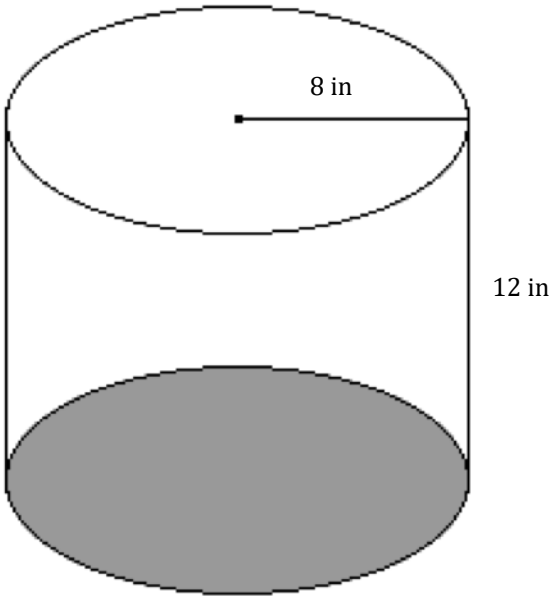

Area of the Base: _____

Volume: _____

Perimeter of Base: _____

Surface Area: _____

**6.** Cylinder



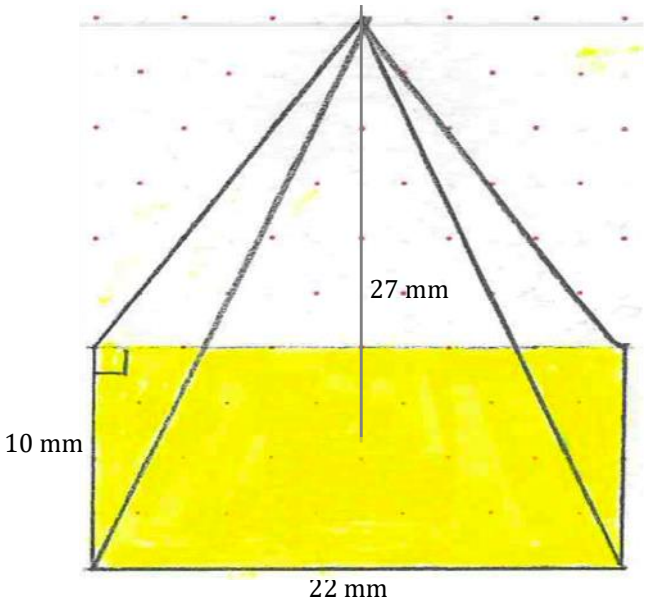

Area of the Base: _____

Volume: _____

Perimeter of Base: _____

Surface Area: _____

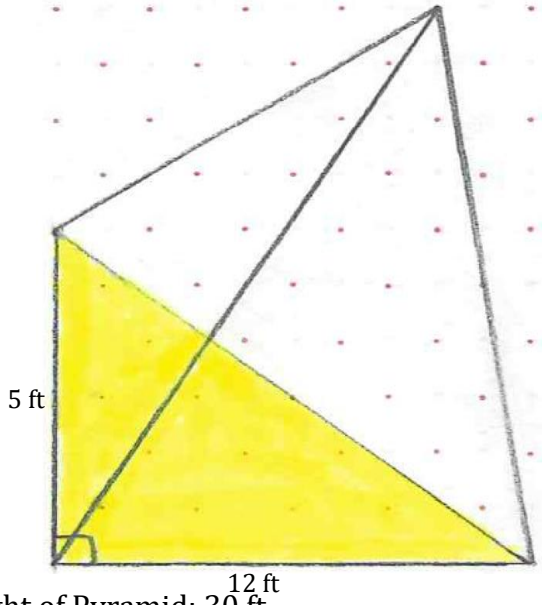
**7.** Rectangular Pyramid




Area of the Base: _____

Volume: _____

**8.** Triangular Pyramid

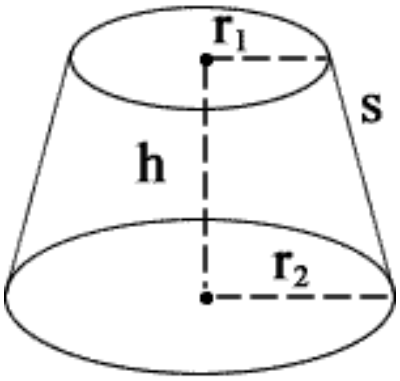



Height of Pyramid: 30 ft.

Area of the Base: _____

Volume: _____

**9.** Frustum (Bases are circles.)




h = 15 in.
$r_1$ = 8 in.
$r_2$ = 12 in
s = 15.5 in

Volume: _____

Area Top: _____

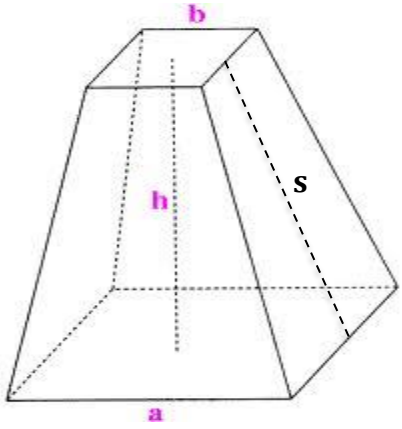
Area Bottom: _____

Perimeter of Top: _____

Perimeter of Bottom: _____

Surface Area: _____

**10.** Frustum (Bases are squares.)




h = 20 cm
b = 3 cm
a = 15 cm
s = 19.4 cm

Volume: _____

Area Top: _____

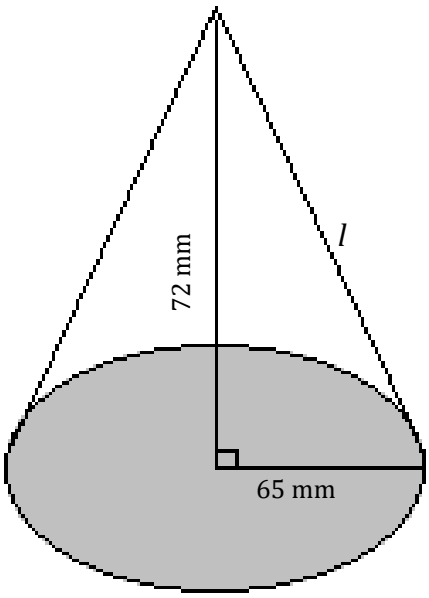
Area Bottom: _____

Perimeter of Top: _____

Perimeter of Bottom: _____

Surface Area: _____

**11.** Cone

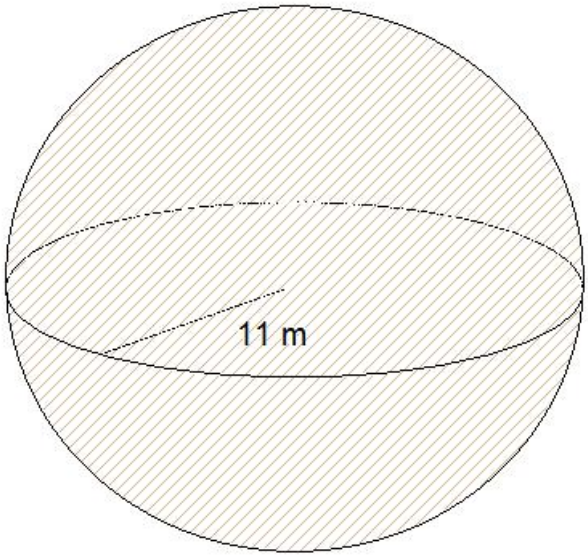



Volume: _____

$l$: _____

Surface Area: _____

**12.** Sphere




Volume: _____

Surface Area: _____