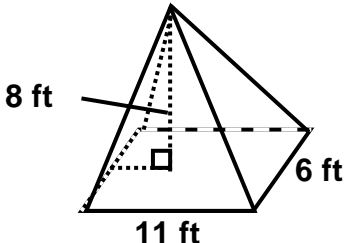


NAME _____ DATE _____ PER. _____

Changing Dimensions in 3-D**Solve each problem as indicated.**

1) _____	The dimensions of a cylinder are tripled. Describe the effect on the surface area of the cylinder.
2) _____	The dimensions of a cone are multiplied by $\frac{1}{3}$. Describe the effect on the volume of the cone.
3) _____	The volume of a rectangular pyramid is 400 in^3 . If the first dimension is reduced by one-fourth, the second dimension is reduced by half, and the third dimension is tripled, by what factor will the volume be affected?
4) _____	A rectangular prism has a surface area of 344 square units. Find its surface area if its dimensions are tripled.
5) _____	The volume of a triangular pyramid is 20 cubic mm. If the dimensions were doubled, what would the new volume be?

6) _____	A right triangular prism has a Volume of 48 cubic units. Find its new volume if two of its dimensions are doubled, and a third dimension is reduced to one-fourth its original length.
7) _____	The volume of a pyramid is 100 cubic ft. If the first dimension is doubled, the second dimension is reduced to one-sixth, and the third dimension is tripled, by what factor will the volume be affected?
8) _____	The volume of a rectangular prism is 298 cubic units. If the dimensions are tripled, what is the volume of the figure in cubic units?
9) _____	<p>The volume of the pyramid is 176 ft^3.</p>  <p>If the dimensions of the pyramid are halved, what will be the volume of the smaller pyramid?</p>
10) _____	<p>If the length and width of the figure below are doubled, how will it affect the volume of the figure?</p> 