Name _____ Date _____

1. I have a prism with the dimensions of 6 cm by 12 cm by 15 cm. Calculate the volume of the prism, then give the dimensions of three different prisms that have $\frac{1}{3}$ of the volume.

	Length	Width	Height	Volume
Original Prism	6 cm	12 cm	15 cm	1080 cm^3
Prism 1	10 cm	4 cm	9 cm	360 cm^3
Prism 2	10 cm	6 cm	6 cm	360 cm^3
Prism 3	10 cm	2 cm	18 cm	360 cm^3

2. Sunni's bedroom has the dimensions of 11 ft by 10 ft by 10 ft. Her den has the same height, but double the volume. Give two sets of the possible dimensions of the den and the volume of the den.

Bedroom: 11 ft x 10 ft x 10 ft = 1100 ft^3

Den: 11 ft x ~~10~~ 20 ft x 10 ft = 2200 ft^3

Den: ~~11~~ 22 ft x 10 ft x 10 ft = 2200 ft^3