**Guided Practice: Rectangular Prisms**

 I need to fill my swimming pool for the summer. I will need to call the local pool supply store to schedule a water delivery truck. The company requires me to tell them the shape and the dimensions of the pool when I call. Why would they need to know the shape and dimensions?

My pool is a rectangular shaped pool. It has a width of 10 feet and a length of 18 feet. The whole pool has a depth of 5.5 feet. ![C:\Users\eligootee\AppData\Local\Microsoft\Windows\INetCache\IE\G928TUTE\pool[1].png]()

The delivery trucks can carry 3,000 gallons of water. They charge$0.04 per gallon

and an extra delivery fee of $15 per truck load.

How much water is needed to fill the pool?

(Hint: Use the internet to determine how many gallons of water are in each cubic foot.)

How much water can one delivery truck carry?

How many trucks are needed?

How much will the delivery cost?

**Guided Practice: Pyramids**

You are renting a pyramid shaped tent for your outdoor party. The tent company has many different options to choose from. The company uses calculations of how many people you plan to have attending and the appropriate area of the floor space needed to accommodate the guests. The company suggests that each person have a minimum of 16 square feet of space. All of the tents are 15 feet tall.

If you are expecting 75 guests to attend the party, how many square feet of space will be needed?

What would be the capacity of a tent of this size?

The company also suggests fans for the summer months. Each fan will maintain a comfortable temperature for every 1000 cubic feet of space. How many fans will you need?

The tent company charges $5 per 100 cubic feet of space plus $25 per fan. How much is your total?