## Domain and Range in the Real World

1. The surface area of a sphere is the total outside area of the sphere. It can be found by using the formula: $A = 4\pi r^2$. Your geometry teacher asks you to find the surface area of a sphere that has a radius of at least 3 inches.

Domain/I: radius $r \geq 3$

Range/O: Area $A \geq 113.1$

Oct 23-6:19 PM

2. A local youth group is planning a trip to a local amusement park. They are taking their church bus which holds 32 people. It will cost $25 for parking and tickets to enter the park are $22.50 per person. The equation that models this situation is: c(n) = 22.5n + 25, where c represents the cost for the group to go the park and n represents the number of people who go on this excursion.

D: $1 \leq n \leq 32$

R: $47.50 \leq C \leq 745$

Oct 23-6:20 PM

3. Joe has an afterschool job at the local sporting goods store. He makes $6.50 an hour. He never works more than 20 hours in a week. The equation s(h) = 6.5h can be used to model this situation, where h represents the number of hours Joe works in a week.

D: $0 \leq h \leq 20$

R: $0 \leq S \leq 130$

Oct 23-6:21 PM