Changing Dimensions: Volume

1. Aubrey is wanting to make an ice skating rink in her backyard this summer. She is going to make it a rectangle that is 30 ft. long and 25 ft. wide. Aubrey wants the rink to be 1 ft. deep. to have enough room for snow and ice. What will the volume of the ice be?

a. 700 cu. ft.
b. 750 cu. ft.
c. 755 sq. ft.
d. 750 sq. ft.

2. If Aubrey doubles the linear dimensions of her ice skating rink, and also doubles its thickness, what will the volume of the ice be now?

a. 3,000 cu. ft. b. 1,500 cu. ft. c. 6,000 cu. ft. d. 7,500 cu. ft.

3. Emmet is looking for a box to wrap a gift in. The box that he found is 2 ft. long and 1.5 ft. wide and 3 inches high, but this box isn't big enough for his gift. He needs a box that has linear dimensions that are twice as big as this one. What will the volume be of the box he needs?

- a. 0.75 cu. ft.
- b. 6 cu. ft.
- c. 1.5 cu. ft.
- d. .50 cu. ft.