1. Skyline College Statistics Club decides to take a trip to Reno during Spring Break to study probability theory first hand. To charter the bus for the round trip costs $1200, and each student needs to pay $260 for food, lodging, and incidentals. What is the total cost for all the students to go on the trip if the number of students going is:

(a) 10 students
(b) 7 students
(c) 15 students
(d) $x$ students

2. Genentech decides to hold a company picnic. There are 4 times as many women as children and 3 times as many men as children who show up. What is the total number of people at the picnic if the number of children is:

(a) 10 kids
(b) 20 kids
(c) 25 kids
(d) 37 kids
(e) $x$ kids (please simplify)
3. An uncle wills some money to his two nieces and one nephew. The older niece is to receive twice what the younger niece receives, the nephew is to receive an amount equal to the average of what the two nieces receive. How much does the nephew receive if the younger niece receives:

(a) $1000
(b) $2000
(c) $5000
(d) $1500
(e) $x \quad \text{(please simplify)}
4. Your living room measures 12 feet by 15 feet. You decide to buy a rug for the room, and you want to make sure it goes in the middle of the room. That is, you want to make sure that the strip of floor showing between the rug and the wall is the same width all around the rug. (see figure) Find the length of the rug if the uncarpeted strip’s width is:

(a) 1 foot
(b) 2 feet
(c) 3 feet
(d) $\frac{1}{2}$ foot
(e) $x$ feet
5. What is the area of the rug in the last problem if the uncarpeted strip’s width is:

(a) 1 foot
(b) 2 feet
(c) 3 feet
(d) \( \frac{1}{2} \) foot
(e) \( x \) feet