

**1. A family spends \$416 on groceries in a 4-month period.**

- a) Estimate the family's total money for groceries during a 6-month period.
- Clearly define your variable.
  - Set up a proportion (including units) to describe the situation.
  - Solve the proportion.
  - Answer in a complete sentence.

b) Discuss any assumptions that you made in part (a).

**2. In a poll of 1000, adults, 770 adults said that engineers are largely responsible for Americans having a high standard of living.**

- a) Estimate how many of 12,500 students at a college would say that engineers are largely responsible for Americans having a high standard of living.

b) Discuss any assumptions that you made in part (a). Describe a possible scenario in which the result in part (a) is an underestimate.

**3. The two triangles shown below are similar. Find the length of the side labeled "x feet" on the smaller triangle. Show all work.**