8.16c

1. Pizza Pies charges $12 for a medium pizza and an additional $0.50 for each topping. Write an equation to represent the total cost, C, of a medium pizza with t toppings. Then identify the independent and dependent variables in this situation.

2. Which two scenarios correctly identify the independent variable?
   - In a daycare the number of kids determines the number of teachers needed. The number of teachers is the independent variable.
   - The amount of money Jerry earns depends on the number of lawns he mows. The number of lawns is the independent variable.
   - The amount of flour Casey has determines the number of cookies she can make. The amount of flour is the independent variable.
   - The number of bows Sarah can make depends on how much ribbon she has. The number of bows Sarah makes is the independent variable.
   - The amount of grass seed needed depends on the size of the yard in square feet the grass seed is the independent variable.

3. Suzanne is starting to babysit to earn extra money. She is charging $15 for each hour that she babysits. What represents the independent variable in this situation?
   A. The total amount charged for babysitting
   B. The rate she is paid per hour
   C. The number of hours she babysits
   D. The number of children she babysits

4. The total cost, t, for frozen yogurt depends on the weight, w, in ounces. If Freddy's Frozen Yogurt Shop uses the equation $t = 0.34w + 2$ to determine the cost of yogurt, which represents the dependent variable in this situation?
   A. 0.34
   B. t
   C. 2
   D. w