Inequalities C
03/01/2012

Student Name: _____

Class: _____

Date: _____

Instructions: **Read each question carefully and select the correct answer.**

1.   The amount of concrete needed to complete one panel of a sidewalk is 648 cubic inches plus 324 cubic inches of concrete per additional inch of thickness desired beyond the minimum requirement. If the concrete crew has more than 750 cubic inches and less than 1,500 cubic inches of concrete that can be used on the panel, what is the maximum number of additional inches of thickness that can be poured beyond the minimum requirement? Round your answer to the nearest whole inch of thickness that satisfies the inequality.

   A.   2 inches
   B.   3 inches
   C.   1 inch
   D.   0 inches

2.   A babysitter charges a check-in fee of $10.00 per day plus $2.75 for each hour that a child is in her care. What is the maximum number of hours a child can be left with the babysitter if the parents can afford to pay more than $25.00 but less than $35.00 per day for child care?   Round your answer to the nearest whole hour that satisfies the inequality.

   A.   5 hours
   B.   9 hours
   C.   6 hours
   D.   10 hours

3.   A motel charges $69.95 each night for two adults plus $10.95 for each additional person. What is the maximum number of children a mother and father can bring on vacation if their budget allows them to spend more than $100.00 but less than $125.00 per night on a motel room?

   A.   2 children
   B.   5 children
   C.   3 children
   D.   6 children

4. The cost to park a vehicle in a public parking lot downtown is $5.00 for up to one hour plus $3.25 per hour after the first hour. What is the maximum number of hours a business person can park in the public lot if his company will reimburse him at least $5.00 and at most $25.00 a day to park? Round your answer to the nearest whole hour that satisfies the inequality.

    A.   6 hours
    B.   7 hours
    C.   1 hour
    D.   0 hours