

## Modeling Review

Date \_\_\_\_\_ Period \_\_\_\_\_

**Identify a variable for each situation and write an equation. Then solve the equation and answer the question in a full sentence.**

- 1) Jimmy bought snacks at a baseball game. He bought 3 hot dogs and a bag of chips. If the chips cost \$2 and he spent \$9.50 in total, how much do the hot dogs cost?
- 2) The sum of three consecutive numbers is 39. What is the largest number?
- 3) Mandy works as a cleaning lady to earn extra money. She earns \$40 flat plus \$12 per hour. If she earned \$76 for one cleaning job, how many hours did it take her to clean the house?
- 4) The sum of four consecutive EVEN integers is 220. What is the smallest integer?

- 5) Mrs. Wallace made cookies and is trying to decide what to do with them. She can send 5 bags to school with her son, 2 bags to work with her husband and have 10 cookies to keep home, or she can send 3 bags to school, 3 bags to work and have 20 cookies to keep home.

How many cookies are in each bag?

How many cookies did Mrs. Wallace make in total?

- 6) Cathy is trying to decide how to spend her birthday money. She can buy 5 outfits, spend \$25 on shoes and have \$50 to spend on jewelry. Or she can buy 2 new outfits, spend \$50 on shoes and have \$175 to spend on jewelry or other stuff.

How much money does each outfit cost?

How much money in total did Cathy get for her birthday?

## Answers to Modeling Review (ID: 1)

- 1)  $3h + 2 = 9.50$ , Each hot dog costs 2.50
- 2)  $n + n + 1 + n + 2 = 39$ , the largest # is 14
- 3)  $40 + 12h = 76$ , she worked for 3 hours.
- 4)  $x + x + 2 + x + 4 + x + 6 = 220$ , the smallest # is 52
- 5)  $5b + 2b + 10 = 3b + 3b + 20$ , each bag holds 10 cookies and she made 80 all together
- 6)  $5x + 25 + 50 = 2x + 50 + 175$ , each outfit is \$50 , she has \$325 in total.