Name: _____

Variables Practice AND Study Guide

(these are all of the types of questions you may see on the Benchmark and/or SOL)

Part 1: Identify the Variable

| Circle the Variable in each expression. | | | | | |
|---|-----|-------|---------|--------|--|
| a-7=13 | w+3 | 8k=48 | 16 m | 28/j=4 | |

Part 2: Solve for the variable

| p-4=14 | a+5=27 | j-18=34 | w+3=37 |
|--------|---------|---------|--------------------|
| p = | a = | j = | w = |
| 4b=24 | c(7)=35 | 54/r=6 | $\frac{15}{y} = 3$ |
| b = | p = | r = | y = |

Part 3: Write the statement as a variable expression

| What is the sum of a and 8? | A number, h, increased by 37 is 413. | C divided by 22. |
|----------------------------------|--------------------------------------|-----------------------------|
| A number decreased by 15 is 239. | What is the product of y and 10? | A number, s, times 8 is 48. |

Part 4: "Word Problems"

| Write an equation that represents "Three full bags of candy contain a total of 90 pieces of candy", where c stands for the number of candy pieces in one full bag? | Julie lost 4 beads from her bracelet. It still has 23 beads. Write an open sentence that represents the beads on her bracelet. | Sam has 3 more marbles than Mark. If m is the number of marbles that Mark has, how many marbles does Sam have? |
|--|---|--|
| Sarah has 18 pieces of green, mint flavored gum to share equally among friends. Which is the variable in this situation? a. The color of the gum b. The number of friends who will get the gum c. The flavor of gum d. The number of pieces of gum | There are y students who volunteered to pull weeds in the school's garden. The principal said she wishes she had 3 times as many volunteers. Write a variable equation to represent this situation. | How many cookies are in a box if the box plus three more equals 23 cookies? Make b stand for the number of cookies in the box. |