

Warm Up:

Write an expression for each situation.

1. 12 cookies divided among n people
2. 8 more than n dollars
3. Two less than n notebooks
4. P slices of pizza shared equally between 4 friends
5. 3 packs of n boxer briefs

Speak Like A Mathematician:

equation:

constraint:

Key Concept: Writing Equations

Step 1: Identify each _____ and assign _____.

Step 2: Identify the _____ and their relationship, in words.

Step 3: Write the sentence as an _____.

Example 1: Write an Equation for a Sentence

Write an equation for each sentence.

- Twenty minus the quotient of seven and x is the same as twice x .
- Four times the quantity of ten less than a number is equal to sixteen.

Example 2: Write an Equation

- Of 799 teens surveyed about what they do online, some use at least one social network. Of those on social network, 430 say people their age are “mostly kind” online and the remaining 193 do not. Write an equation to find the number of teens surveyed who are not on a social network.

Step 1:

Step 2:

Step 3:

- Eghosa has read 12 of the 32 chapters in his assigned book. He plans to finish the book by reading c chapters each for 8 days. Write an equation to represent this situation.

Step 1:

Step 2:

Step 3:

Example 3: Write an Equation with Multiple Variables

- The perimeter of a rectangle is twice the sum of the length and the width.
- The horsepower of a motor is the product of the motor speed and the torque, divided by 5252.
- Each year, 24 million more than twice as many packages of plain bagels sold as cinnamon bagels. There were 136 million packages of plain bagels sold last year. Write an equation that can be used to find the number of millions of cinnamon bagel packages that were sold

Tonight’s Homework: