Unit 7 Objective 6 Remediation

Interpret inequalities given real-world situations

For each of the following:

- Underline Key Words in the Problem
- Solve the Inequality
- Write the Answer in Sentence Form

Example

Dallastown lacrosse had $2,000 to spend on supplies. The team purchased a lacrosse stick for $90. New lacrosse balls cost $3 each. The inequality $90 + 3b \leq 2{,}000$ can be used to determine the number of new lacrosse balls (b) that the team can purchase. Determine the number of lacrosse balls the team can purchase.

Inequality: $90 + 3b \leq 2{,}000$

-90 -90

$3b \leq 1910$

$\div 3 \quad \div 3$

$b \leq 636.\overline{6}$

Sentence Form:

The team can buy at most 636 lacrosse balls.

Try These:

Ex. 1

Jane has $700 to spend on pizza and soda for a party. Jane spent $200 on soda. Pizzas cost $11 each. The inequality $200 + 11p \leq 700$ can be used to determine the number of pizzas that Jane can purchase. Determine the maximum number of pizzas Jane can purchase.

Ex. 2

The Dallastown volleyball team had $3,000 to spend on supplies. The team spent $56 on a new net. New Tachikara volleyballs cost $39.99. The inequality $56 + 39.99v \leq 3{,}000$ can be used to determine the number of new volleyballs (v) the team can purchase. Determine the maximum number of volleyballs the team can purchase.

Ex. 3

Mary can spend $100 on candy and gum. She spent $45 on candy. Each pack of gum costs $1. The inequality $45 + g \leq 100$ can be used to determine the number of packs of gum (g) that Mary can purchase. Determine the maximum number of packs of gum Mary can purchase.

Ex. 4

Fran has $300 to spend on party supplies and pizza for her birthday party. Fran spent $180 on party supplies. Pizzas cost $8 each. The inequality $8p + $180 ≤ $300 can be used to determine the number of pizzas (p) that she can purchase. Can Fran purchase 16 pizzas?