NAME

Module 5 Solving Linear Inequalities of One Variable

Lesson 7 Solving Problems Using Inequalities of One Variable

Set 1

1. Ms. Lee must spend less than $25.50 on books for her class. She has a book in her basket that costs $9.80. How much can Ms. Lee spend on other books?

$b < 15.70$ Ms. Lee can spend any amount less than $15.70 on other books.

2. Hallie earns a commission at a clothing store. She must earn no less than $720 in commission to buy a new car. If Hallie earns a 15% commission on her sales, what is the minimum amount she must sell?

$s \geq 4{,}800$ Hallie must sell at least $4800 worth of clothes.

3. The average graduating class size for schools in Westfield increased 5% from 2002 to 2003. However, the 2003 average was still below the 2003 state average of 399 students. What was the maximum possible value for the average number of students in Westfield's graduating class in 2002?

$s < 380$ The maximum possible average for the number of graduating students in 2002 was 379.

4. Lester played two rounds of golf while he was on vacation and scored 72 in each round. What is the maximum score he can shoot in a third round of golf so that his average score is less than 70?

Lester's score must be less than 66, so the maximum score he can shoot is 65.

5. Sheila will invest 4,000 in two accounts. One earns 4% interest and the other earns 5% interest. Sheila wants to earn at least $190 in interest in the first year. What is the minimum amount Sheila must invest at 5%?

Sheila must invest at least $3,000 in the account that earns 5%.