|   | y Word Problems<br>Name | Class |  |  |
|---|-------------------------|-------|--|--|
| Directions: Translate each clue word or phrase into its mathematical meaning. |                         |       |  |  |
| each  |                         |       |  |  |
| reduced by  |                         |       |  |  |
| is less than or equal to  |                         |       |  |  |
| quotient  |                         |       |  |  |
| at most   |                         |       |  |  |
| difference  |                         |       |  |  |
| is greater than   |                         |       |  |  |
| of  |                         |       |  |  |
| at least  |                         |       |  |  |

## Examples:

Translate each written sentence into a mathematical inequality. Solve to find the number. Check your solution.

- 1. Sixteen is greater than a number plus negative five.
- 2. Thirteen subtracted from a number is less than negative two.
- 3. A number doubled is at most twenty.

## PRACTICE:

Directions: Write an inequality for each sentence. Then simplify the inequality. Check your solution.

- 1. Fifteen plus a number is greater than 10.
- 2. Ten increased by a number is less than or equal to three.

| 3. The difference of a num   | ber and 6 is at mo              | st -5.                  |             |  |
|--|---------------------------------|-------------------------|-------------|--|
| 4. Challenge: The sum of tv  | vice a number and               | 3 is no more thai       | n 7.        |  |
| Translate each written sentence into a mathematical inequality. Graph your solution. Check your solution.  5. Mrs. Avink can run at most 5.5 miles per day. Write and graph an inequality to describe this statement.                          |                                 |                         |             |  |
|  |                                 |                         | Inequality: |  |
| <del>&lt;++++++++++++++++++++++++++++++++++++</del>  |                                 |                         |             |  |
| 6. The maximum amount of people the elevator at the hotel can hold is 14 people.   |                                 |                         |             |  |
|  |                                 |                         | Inequality: |  |
| <del>&lt;++++++++++++++++++++++++++++++++++++</del>  |                                 |                         |             |  |
| Directions: Choose the inequality that best models the sentence.   |                                 |                         |             |  |
| 7. The car was going faster A) c > 75  |                                 |                         | D) c ≥ 75   |  |
| <ol> <li>Chris is less than six fee</li> <li>A) F≥ 6</li> </ol>  | et tall.<br>B) F > 6            | <i>C</i> ) F < 6        | D) F ≤ 6    |  |
| 9. Morgan's basketball tear<br>A) t < 53   | n scored at least 5<br>B) t >53 | 53 points.<br>C) t ≤ 53 | D)†≥53      |  |
| 10. A baseball stadium can hold at most 5,225 people. The stadium has already admitted 4,957 people. How many more people can the stadium hold? Write an inequality to model this situation. Simplify, and graph your solution. Show all work. |                                 |                         |             |  |
|  |                                 | <del>(</del>            | <del></del> |  |
| Variable with label:   |                                 |                         |             |  |
| Inequality:  | <del></del>                     | solution:               |             |  |