Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_ Core:\_\_\_\_

Writing and Graphing Inequalities

*Write an inequality for each situation described.*

1. A city had more than 2 feet of snow in one snowfall. (Let f = feet of snow) \_\_\_\_\_\_\_\_\_\_\_\_

2. There are less than 35 students in a class. (Let x = students) \_\_\_\_\_\_\_\_\_\_\_\_\_

3. A student’s grade on a test is at least 85. (Let g = grade) \_\_\_\_\_\_\_\_\_\_\_\_\_

4. The number of minutes for a cell phone plan is at most 500. (Let m = minutes) \_\_\_\_\_\_\_\_\_\_\_\_

*Graph the following inequalities.*

|  |  |
| --- | --- |
| 5. x < -2 | 6. g > 7 |
| 7. -3 ≥ y | 8. m ≤ 0 |

*Looking at the graphs, write an inequality.*

|  |  |
| --- | --- |
| 9.  Inequality: | 10.  Inequality: |
| 11.  Inequality: | 12.  Inequality: |

*Write and graph each inequality.*

|  |  |
| --- | --- |
| 13. There are fewer than 25 students (s) in the class. | 14. Above 18 people (p) in the room had brown hair. |

Fill in the blank with >, <, or =.

15. If 3<4 then 3(6)\_\_\_\_4(6) 16. If 5>2 then 5(-1)\_\_\_\_2(-1)