Inequalities - Day 2 Notes

| $<$ | $\leq$ | $>$ | $\geq$ |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
|  |  |  |  |

Solve and graph the following inequalities. Then write what the solution is using a complete sentence.

Name $\qquad$
Date $\qquad$ Period $\qquad$

1. $2 y-8>12$

2. $-4 x<32$
3. A number increased by two is at most 6 .

4. Four times a number is more than 108.


## THE BIRTHDAY PRESENT

Johnnie has found a cool DVD player that he would like to buy his mother for her birthday. His dad decides to help him out by giving him $\$ 25$ to open a checking account. He mows yards for other people in the neighborhood, and after paying his expenses, he earns $\$ 7$ for each yards that he mows.
5. Make a table to show the relationship between the number of yards mowed and the amount of cash in his checking account.

| Number <br> of Yards <br> Mowed | Process | Money in <br> Checking <br> Account |
| :---: | :--- | :--- |
| 0 |  |  |
| 1 |  |  |
| 2 |  |  |
| 3 |  |  |

6. Write an expression to show the relationship between the number of yards mowed and the amount of cash in his checking account.

Create a table using the calculator to find the answer for the following questions. Make sure to put the answer in the second space of the table.
7. How much money will Johnnie have in his account after mowing 7 yards?

| yards | money |
| :--- | :--- |
|  |  |
|  |  |
|  |  |

8. How many yards will he have to mow to have more than $\$ 75$ in his account?

| yards | money |
| :--- | :--- |
|  |  |
|  |  |
|  |  |

Represent the situations below with a table and an inequality. Then solve the inequality.
9. How much money will Johnnie have in his account if he mowed at least 16 yards?

| yards | money |
| :--- | :--- |
|  |  |
|  |  |
|  |  |

10. How many yards will he have to mow to have no more than $\$ 900$ in his account?

