$\qquad$ Date: $\qquad$ Core: $\qquad$

## Math 7/7+ Unit 4 Review: Inequalities

Write an inequality for each situation described below.

1. Today's attendance (a) will be at least 250 people. $\qquad$
2. Tomorrow's attendance (a) will be less than 200 people. $\qquad$
3. Last weekend, there were more than 75 birds (b) in the sanctuary. $\qquad$
4. Next weekend, there will be at most 90 birds (b) in the sanctuary. $\qquad$
5. Each prize $(p)$ is worth over $\$ 150$. $\qquad$
6. You can walk there in 20 minutes ( $m$ ) or less. $\qquad$
Solve and graph each of the following inequalities.

| 7. $k-(-178)>-231$ | 8. $\frac{k}{-8}<13$ | 9. $-87 \leq 9+(-49)$ |
| :---: | :---: | :---: |
| 10. $5 x-8<17$ | 11. $-10 \geq-18+\frac{m}{6}$ | 12. $-6+-4 g+(-12) \leq-2$ |
| $\stackrel{+1-1}{ }$ | $\stackrel{1}{+1+1}$ | $\stackrel{1}{+1}$ |



Define the variable. Write, solve \& graph the inequality to represent the solution set.
16. The school record for the most points scored in a football season is 85 . Lawrence has 44 points so far this season. What is the solution set for how many more points he needs to break the record?

18. Each month, Marnie pays a service fee of $\$ 12$ plus $\$ 0.06$ per kilowatt-hour for electricity. This month, she has budgeted $\$ 84$ for her electricity. What is the solution set for the number of kilowatt-hours Marnie can use and stay within budget?

20. Five times the difference of a number and 8 is at most 105. What solution set represents what the number can be?
17. A ride at an amusement park requires a height of at least 48 inches. Your little brother is 37 inches tall. What is the solution set for how many more inches must he grow in order to go on the ride?

19. Your mom gave you $\$ 25$ to go to the movies. You spend $\$ 8$ on your ticket and $\$ 5$ on a small bag of popcorn. You want to spend the rest of your money on boxes of candy to share with your friends. If each box of candy costs $\$ 3$, what solution set represents the number of boxes of candy you can buy?


