

NAME _____

DATE _____

PER. _____

WRITING AND SOLVING INEQUALITIES – Day 1

Write an inequality for each situation.

1. Three times the sum of a number and 4 is no less than 22.	2. Twelve percent of a number increased by 12 is at most 82.
3. The quotient of a number and 4 is at least 10.	4. -17 is more than the product of 5 and a number.

Write an inequality and solve.

5. Garrett wants to save at least \$350 for his upcoming trip. He has saved \$48.25 already, and he has a job where he earns \$8.50 per hour. How many hours will he have to work to reach his goal?

Inequality: _____

6. You have \$30 to spend on movie tickets this month. You have already spent \$15.75. If each movie ticket costs \$5.25, how many more times can you go to the movies this month?

Inequality: _____

7. One cell phone company offers a plan that costs \$29.99 and includes unlimited nights and weekend minutes. Another phone company offers a plan that costs \$19.99 and charges \$0.35 per minute during nights and weekends. For what number of night and weekend minutes does the second company's plan cost more than the first company's plan?

Inequality: _____

Choose the best answer. SHOW ALL WORK!

8. Which statement is modeled by $2p + 5 < 11$?

- A. The sum of 5 and 2 times a number p is at least 11.
- B. Five added to the product of 2 and p is less than 11.
- C. Two times p plus 5 is at most 11.
- D. The product of 2 and p increased by 5 is 11.

9. Which is NOT a solution of the inequality $33 - 3h \leq -18$?

- A. 17
- B. 21
- C. 15
- D. 45

10. Which is NOT a solution of the inequality $-12 \geq -4x - 8$?

- A. -5
- B. 2
- C. 7
- D. 10

Answers in random order (except for #1-4): A, B, C, $x \geq 29$, $x \geq 35.5$, $x \leq 2$