Word Problems Leading to Inequalities

Grade 7 Place Value Worksheet

SOLVE THE FOLLOWING WORD PROBLEMS

1. What is the correct inequality for this statement? x is at most 30
   a. $x < 30$ b. $x > 30$ c. $x \leq 30$ d. $x \geq 30$

2. What is the correct inequality for this situation? 7x is at least 14
   a. $7x < 14$ b. $7x > 14$ c. $7x \leq 14$ d. $7x \geq 14$

3. What is the correct inequality for this word problem? 5 less than a number y is under 20
   a. $5 - y < 20$ b. $y - 5 < 20$ c. $5 - y \leq 20$ d. $y - 5 \leq 20$

4. Ann wants to spend at most $8.50 on school supplies. She needs to purchase a binder costs $6.89 and wants to spend the rest on pens, which cost $0.59 each. Write an inequality involving the variable **x** to represents this situation, where x is the number of pens Ann can buy?

5. Laurie needs to collect at least 1,000 signatures for a petition. She has 520 and wants to collect the same number each week. She has 6 more weeks. Which inequality represents this situation?
   a. 520x + 6 ≤ 1000 b. 520 + 6x ≥ 1000 c. 520x + 6 ≥ 1000 d. 520 + 6x ≤ 1000

6. Tracy has $25 in her savings account. To save more money, Tracy is selling lemonade for $0.50. How many cups of lemonade does Tracy need to sell to have more than $150 in her savings account?

7. Lia wants to spend under $15 on lunch. She decides to buy pizza slices, which cost $2.50 each and a two liter soda which costs $1.75. What is the maximum number of pizza slices Lia can buy?

8. Find the solution. The cost of a gallon of orange juice is $3.50. What is the maximum number of containers you can buy for $15?

9. Abram works at a video game store Mon-Fri. He earns $80 per day plus $8 per video game sold. On Thursday, he makes at least $176. Which solution represents the possible number of video games Abram sold?
   a. $x \geq 12$ b. $x \geq 22$ c. $x \leq 12$ d. $x < 2$

10. Cassie saved more than $36. Which inequality represents the amount that she saved?

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Answers

1. c

2. d

3. b

4. $6.89 + 0.59x \leq 8.50$

5. b

6. 350

7. 7

8. 4

9. a

10. $x \geq 36$