

Inequalities and Replacement Set (6.EE.5 and 6.EE.8)

Name: _____

Date: _____

1. A go-cart has a maximum weight limit of 240 pounds. Which inequality correctly represents this weight limit, w ?

- A. $w \leq 240$ pounds B. $w < 240$ pounds
 C. $w \geq 240$ pounds D. $w > 240$ pounds

2. Which is the solution to the following inequality?

$$2x - 7 \geq 9$$

- A. $x \geq 8$ B. $x \geq 1$
 C. $x \leq 8$ D. $x \geq -1$

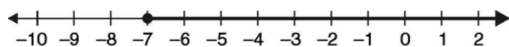
3. What is the solution to the inequality $x - 5 > 14$?

- A. $x > 9$ B. $x > 19$
 C. $x < 9$ D. $x < 19$

4. Jason is planning to go to a concert. He has \$25.00. A ticket costs \$11.75. Which inequality represents the amount of money Jason can spend on refreshments?

- A. $x + 11.75 \leq 25$ B. $x - 11.75 \leq 25$
 C. $x + 11.75 \geq 25$ D. $x - 11.75 \geq 25$

5. Use the graph below to answer the question that follows.



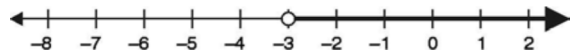
This graph is the solution set for which inequality?

- A. $x - 14 > 7$ B. $x - 7 \geq 14$
 C. $2x \geq -14$ D. $14x \geq -2$

6. Which graph represents $x \geq 3$?

- A. B. C. D.

7. Use the line graph below to answer the question that follows.



What is the solution set of the graph above?

- A. $x < -3$ B. $x \leq -3$
 C. $x > -3$ D. $x^3 - 3$

8. A box of cookies costs \$4. Freeman has \$34. The inequality below can be used to find the numbers of boxes of cookies, x , Freeman can buy with \$34.

$$4x \leq 34$$

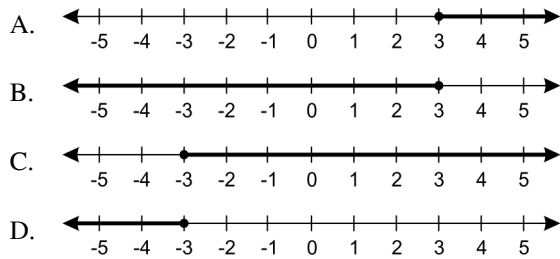
Which statement describes all the possible numbers of boxes of cookies Freeman can buy with \$34?

- A. He can buy 8 boxes of cookies or fewer.
 B. He can buy 9 boxes of cookies or fewer.
 C. He can buy 30 boxes of cookies or fewer.
 D. He can buy 38 boxes of cookies or fewer.

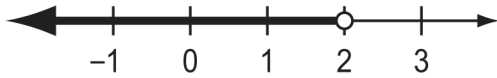
9. Use the inequality below to answer question(s).

$$5 - x \leq 8$$

Which graph represents the solution set for the inequality?



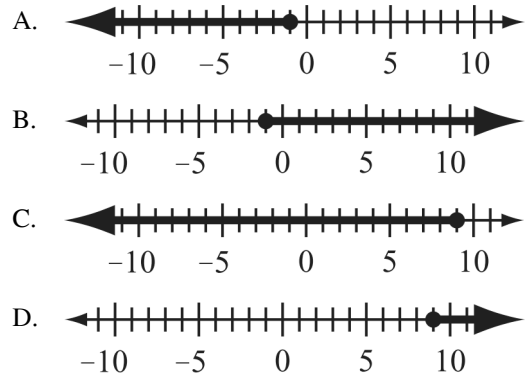
10. Which of the following inequalities is graphed on the number line below?



- A. $x < 2$ B. $x \leq 2$ C. $x > 2$ D. $x \geq 2$

11. Which of the following graphs represents the solution of the inequality below?

$$x - 5 \leq 4$$



12. An office manager budgeted \$400 for office supplies. The manager ordered 2 toner cartridges for \$89 each and a box of printer paper for \$27. Each price includes tax.

What is the greatest number of additional boxes of printer paper the manager can order with the money left in the budget?

- A. 2 B. 7 C. 8 D. 10