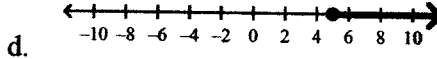
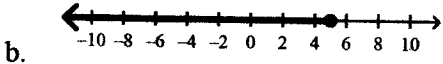
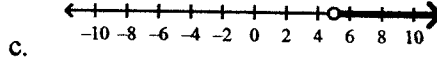
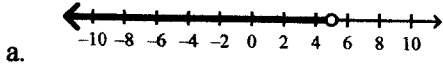


MATH 9 - CHAPTER 9 - PRETEST

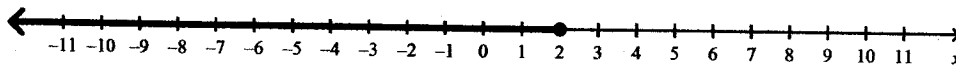
Multiple Choice

Circle the choice that best completes the statement or answers the question.

1. Which number line can represent the statement, "Only children at least 5 years old may swim in the wave pool"?



2. Which inequality is represented by the number line below?



- a. $x > 2$ c. $x < 2$
 b. $x \geq 2$ d. $x \leq 2$
3. Emerson keeps at least \$55 in his savings account. Represent this statement algebraically.
- a. $s > 55$ c. $s < 55$
 b. $s \geq 55$ d. $s \leq 55$

4. What is a verbal representation of $n \geq -6$?
- a. All numbers greater than -6 and including -6 .
 b. All numbers greater than -6 but not including -6 .
 c. All numbers less than -6 and including -6 .
 d. All numbers less than -6 but not including -6 .

5. Solve $y + 7 > 12$.

- a. $y > 5$
 b. $y > 17$
 c. $y < 5$
 d. $y < 17$

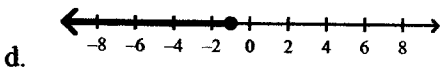
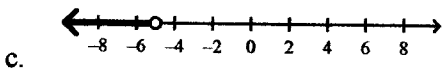
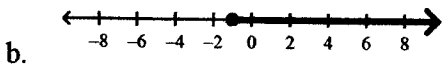
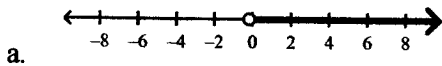
6. Solve $\frac{x}{1.8} \geq -2$.

- a. $x \leq -3.6$
 b. $x \geq 3.6$
 c. $x \leq 3.6$
 d. $x \geq -3.6$

7. Solve $7 < \frac{1}{2}x$.

- a. $x < 3.5$
- b. $x < 14$
- c. $x > 14$
- d. $x > 3.5$

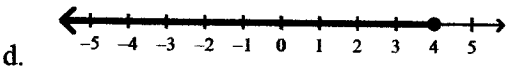
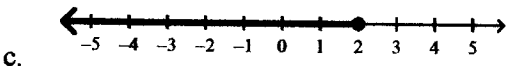
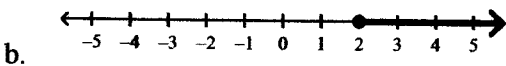
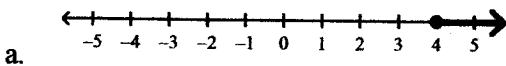
8. Determine which number line represents the solution to $n - \frac{2}{3} \geq \frac{-5}{3}$.



9. What is the solution to $6 - 2x > 4$?

- a. $x > 1$
- b. $x < 1$
- c. $x < 4$
- d. $x > 4$

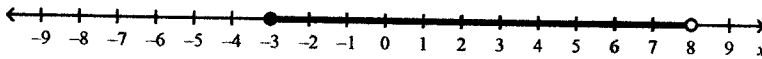
10. Which number line represents the solution to $10 - 6c \leq 2(c - 3)$?



Short Answer

11. What is the difference between $x < 5$ and $x \leq 5$? Explain your answer in terms of the boundary points.

12. The solution to an inequality is shown below. Represent the solution verbally and algebraically.



verbal

algebraic

13. On Saturdays, Sports Galore sells 32 more pairs of running shoes than on any other day of the week. The store has never sold more than 104 pairs of running shoes in one day.

a) What inequality represents this situation?

b) How many pairs of running shoes could have been sold on any other day of the week?

14. A triangle has side lengths $2x + 1$, $2x + 3$, and $2x - 2$. What values of x give the triangle a perimeter of 44 or more?

work

answer

Problem

15. Julia must keep her cell-phone bill below \$65 per month. The basic charge is \$25 and it costs her \$3 per min for long-distance phone calls.

a) What inequality can be used to determine how many long-distance minutes Julia can afford?

b) How many minutes of long-distance phone calls can Julia make?

16. Mochan Electric bought 3.8 m of copper wire. After some of the wire was used, more than 2.3 m remained. How much wire was used?

work

answer

17. Cho needs to buy flashlight batteries for a camping trip. The batteries cost \$1.85 each. If Cho has \$10.00 to spend, how many batteries can he buy?

work

answer

18. Collin weighs 20 kg more than Huang. Together they weigh at least 177 kg. What is Collin's least possible weight?

work

answer