Exercises - Compound and Absolute Value Inequalities

1

Which of the following numbers is NOT a solution to the inequality 3-n < -2 or $2n+3 \le -1$?

- A) -6
- B) -2
- C) 2
- D) 6

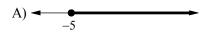
2

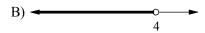
Which of the following numbers is a solution to the inequality 5w+7>2 and $6w-15 \le 3(-1+w)$?

- A) -1
- B) 2
- C) 5
- D) 8

3

Which of the following is the graph of $-x \le 5$ and $7 - \frac{1}{2}x > x + 1$?







4

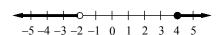
If -2 < n < -1, what is the value of $7 + \frac{1}{2}n$ rounded to the nearest whole number?

5

Which of the following numbers is NOT a solution to the inequality $\left| \frac{1}{2} x - 1 \right| \le 1$?

- A) 0
- B) 2
- C) 4
- D) 6

6



Which of the following is the compound inequality for the graph above?

- A) x < -2 or $4 \le x$
- B) $x \le -2$ or 4 < x
- C) $-2 < x \le 4$
- D) $-2 \le x < 4$

7

If $\frac{1}{4}x - 1 \le -x + 5$, what is the greatest possible value of x?

8

If $\left| \frac{3}{4}n - 2 \right| < 1$ and *n* is an integer, what is one possible value of *n*?