

Name:

Period:

Date:

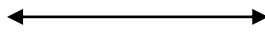
Practice Worksheet: Inequalities & Interval Notation

Write the inequality in interval notation. Sketch using interval notation (parenthesis and/or brackets). Then determine if the interval is bounded or unbounded (circle one).

1] $x \leq 5$

Interval notation:

sketch:



bounded or unbounded?

2] $x < 0$

Interval notation:

sketch:



bounded or unbounded?

3] $x \geq 4$

Interval notation:

sketch:



bounded or unbounded?

4] $-2 < x < 2$

Interval notation:

sketch:



bounded or unbounded?

5] $-1 \leq x \leq 0$

Interval notation:

sketch:



bounded or unbounded?

6] $-2 \leq x < 5$

Interval notation:

sketch:



bounded or unbounded?

7] $x \leq -3$ or $x \geq 2$

Interval notation:

sketch:



bounded or unbounded?

8] $0 \leq x \leq 5$

Interval notation:

sketch:

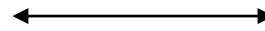


bounded or unbounded?

9] $x < -2$ or $x \geq 1$

Interval notation:

sketch:



bounded or unbounded?

10] x is non-negative

Interval notation:

sketch:



bounded or unbounded?

11] x is greater than -2 and at most 4

Interval notation:

sketch:

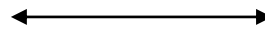


bounded or unbounded?

12] x is at least 10 and at most 22

Interval notation:

sketch:



bounded or unbounded?

13] x is less than 45 or more than 65

Interval notation:

sketch:

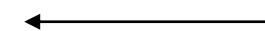


bounded or unbounded?

14] x is no more than 25

Interval notation:

sketch:

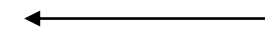


bounded or unbounded?

15] x is at least -6 and less than 0

Interval notation:

sketch:



bounded or unbounded?

16] x is less than 5 but no less than -3

Interval notation:

sketch:



bounded or unbounded?

Place parenthesis or brackets in the appropriate locations to create an accurate interval notation for each real-world situation below.

17] 21, ∞ Legal drinking age in U.S.

18] 18, ∞ Voting age in U.S.

19] 0.08, ∞ Blood alcohol content to get arrested for DUI

20] $-\infty$, 32 Solid state of water; Water freezes at 32°F and boils at 212°F