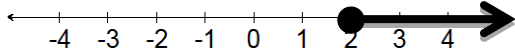


Math 7 Test
SOL 7.15—Inequalities

Name: _____

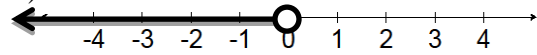
Choose the correct inequality for each graph. Circle the letter of your answer choice.

1)



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

2).



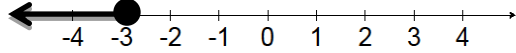
- A. $x \leq 0$
- B. $x < 0$
- C. $x > 0$
- D. $x \geq 0$

3)



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

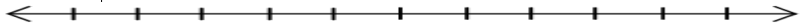
4)



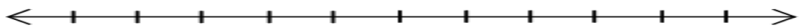
- A. $x \leq (-3)$
- B. $x < (-3)$
- C. $x \geq (-3)$
- D. $x > (-3)$

Solve and graph the solution for questions 5 - 8. Show all steps.

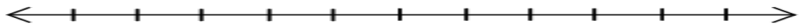
5) $-4w < 16$



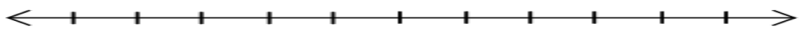
6) $5 > \frac{a}{-2}$



7) $-7x \geq (-28)$



8) $\frac{a}{3} \leq (-11)$



Solve each of the following. Show all work. Circle all of the values in the box for each problem which could be part of the solution set.

9) $t - 6 < 3$

9	-1	12
4	18	-9

10) $-7n \leq 42$

7	-10	6
3	-6	-7

11) $q + \frac{5}{8} \geq \frac{1}{8}$

$\frac{2}{5}$	-1	-5
$\frac{3}{4}$	$-\frac{5}{8}$	5

12) $\frac{c}{-2.5} > (-3.4)$

8.8	8.05	7
-0.8	9.03	$\frac{63}{7}$

The following inequalities contain errors. Find and circle the error in each exercise. Copy each problem and correct the error on the lines to the right of the mistake.

13) $p - 4 > 17$

$p - 4 + 4 > 17 - 4$

$p > 13$

14) $18 + k < 6$

$18 - 18 + k < 6 - 18$

$k < 12$

15) $-3x \geq 18$

$\frac{-3x}{-3} \geq \frac{18}{-3}$

$x \geq (-6)$

16) $\frac{c}{4} \leq (-32)$

$(\frac{1}{4}) \frac{c}{4} \leq (-32) (\frac{1}{4})$

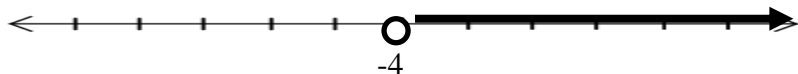
$c \leq (-8)$

SOL 7.15- Inequalities

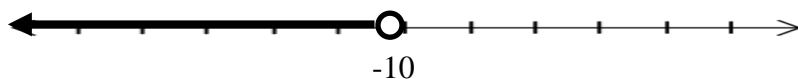
Answer Key

1. D
2. B
3. D
4. A

5. $w > (-4)$



6. $a < (-10)$



7. $x \leq 4$



8. $a \leq (-33)$



9. $t < 9$

Circled numbers: -1, 4, -9

10. $n \geq (-6)$

Circled numbers: -6, 3, 7, 6

11. $q \geq (-\frac{1}{2})$

Circled numbers: $\frac{2}{5}, \frac{3}{4}, 5$

12. $c < 8.5$

Circled numbers: -0.8, 7, 8.05

13. Error occurred in 2nd line. Should add 4 to 17, not subtract 4 from 17.

Answer: $p > 21$

14. Error occurred in 3rd line. Six minus 18 = -12, not 12

Answer: $k < (-12)$

15. Error occurred in 3rd line. Should have flipped the inequality sign.

Answer: $x \leq (-6)$

16. Error occurred in 2nd step. Should have multiplied by 4 not $\frac{1}{4}$.

Answer: $c \leq (-128)$