

Chapter 1 Review for Final

Date _____ Period _____

Identify a pattern and find the next three numbers in the pattern.

1) -4, -1, 2, 5...

2) 3, 21, 147, 1029...

State what sets of numbers the following numbers belong to.

3) -10

4) $-\frac{3}{4}$

5) π

6) $\sqrt{2}$

Simplify the expressions given that $a = 3$, $b = -4$ and $c = -10$

7) $2a + 3b$

8) $-c + 2(a + b)$

9) $-b^2 + a(c - 8)$

10) $a^2 + 2b^2 - c^2$

Solve each equation.

11) $-2(7 - x) = 2$

12) $-19 = -2(8 + n) + 3n$

13) $2(1 + 7b) = -33 + 7b$

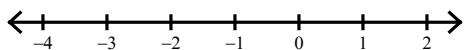
14) $-8(2v - 5) = 8(4 - 3v) + 8v$

15) $|-2 - 3n| + 2 = 10$

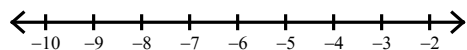
16) $|2 - 4a| = 38$

Solve each inequality and graph its solution.

17) $3(5k + 5) \geq 0$

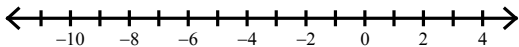


18) $-(3p + 2) + 5p \geq -16$

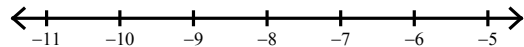


Solve each compound inequality and graph its solution.

19) $5x \geq 5$ or $x + 4 \leq -2$

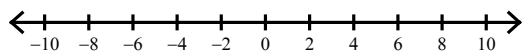


20) $-54 \leq 6n \leq -48$

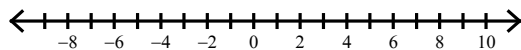


Solve each inequality and graph its solution.

21) $\left| \frac{x}{2} \right| < 4$



22) $|4x| - 7 \geq 13$



Chapter 1 Review for Final

Date _____ Period _____

Identify a pattern and find the next three numbers in the pattern.

1) $-4, -1, 2, 5\dots$

 $8, 11, 14$

2) $3, 21, 147, 1029\dots$

 $7203, 50421, 352947$ **State what sets of numbers the following numbers belong to.**

3) -10

 $Integer, Rational, Real$

4) $-\frac{3}{4}$

 $Rational, Real$

5) π

 $Irrational, Real$

6) $\sqrt{2}$

 $Irrational, Real$ **Simplify the expressions given that $a = 3$, $b = -4$ and $c = -10$**

7) $2a + 3b$

 -6

8) $-c + 2(a + b)$

 8

9) $-b^2 + a(c - 8)$

 -70

10) $a^2 + 2b^2 - c^2$

 -59 **Solve each equation.**

11) $-2(7 - x) = 2$

 $\{8\}$

12) $-19 = -2(8 + n) + 3n$

 $\{-3\}$

13) $2(1 + 7b) = -33 + 7b$

 $\{-5\}$

14) $-8(2v - 5) = 8(4 - 3v) + 8v$

 $No\ solution.$

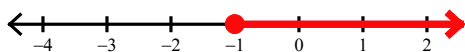
15) $|-2 - 3n| + 2 = 10 \left\{ -\frac{10}{3}, 2 \right\}$

16) $|2 - 4a| = 38$

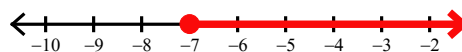
 $\{-9, 10\}$

Solve each inequality and graph its solution.

17) $3(5k + 5) \geq 0$

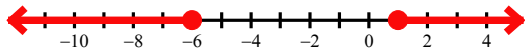


18) $-(3p + 2) + 5p \geq -16$

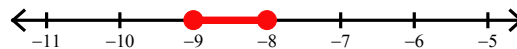


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19) $5x \geq 5$ or $x + 4 \leq -2$

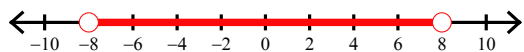


20) $-54 \leq 6n \leq -48$



Solve each inequality and graph its solution.

21) $\left| \frac{x}{2} \right| < 4$



22) $|4x| - 7 \geq 13$

