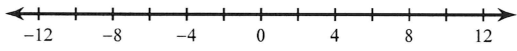


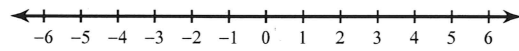
2-11 Inequalities With Absolute Value_hw

Solve each inequality and graph its solution.

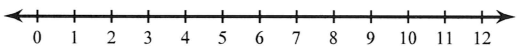
1) $|x| \geq 7$



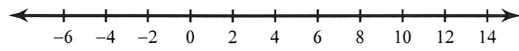
2) $|n| < 5$



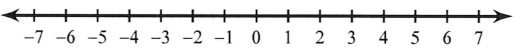
3) $|b - 6| > 3$



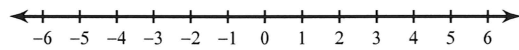
4) $|-4 + n| \leq 8$



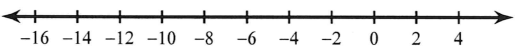
5) $3 + 3\left|\frac{n}{5}\right| < 6$



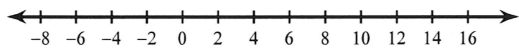
6) $4\left|\frac{k}{2}\right| - 3 > -1$



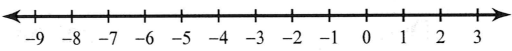
7) $|-5 - x| \geq 7$



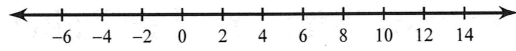
8) $|4 - n| \leq 10$



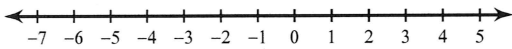
$$9) 3|3+x|+4 \leq 13$$



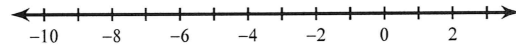
$$10) -1-4|p-4| \leq -25$$



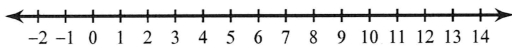
$$11) -2|-4v|+2 \geq -22$$



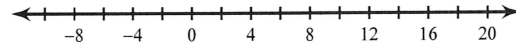
$$12) 2|3+n|-2 \geq 2$$



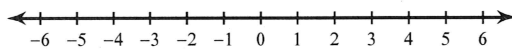
$$13) 4+5|5-x| < 34$$



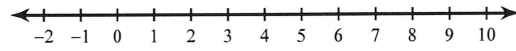
$$14) 5-|5-a| < -5$$



$$15) 4|1-r|-3 \geq 1$$



$$16) 4|2-x|-5 \leq 3$$



Answers to 2-11 Inequalities With Absolute Value_hw

- 1) $x \geq 7$ or $x \leq -7$: A number line from -12 to 12 with tick marks every 2 units. Solid dots are placed at -7 and 7. Lines extend from these dots to the left and right ends of the number line, respectively.
- 2) $-5 < n < 5$: A number line from -6 to 6 with tick marks every 1 unit. Open circles are placed at -5 and 5. Lines extend from these circles to the right and left ends of the number line, respectively.
- 3) $b > 9$ or $b < 3$: A number line from 0 to 12 with tick marks every 1 unit. Open circles are placed at 3 and 9. Lines extend from these circles to the right and left ends of the number line, respectively.
- 4) $-4 \leq n \leq 12$: A number line from -6 to 14 with tick marks every 2 units. Solid dots are placed at -4 and 12. Lines extend from these dots to the left and right ends of the number line, respectively.
- 5) $-5 < n < 5$: A number line from -7 to 7 with tick marks every 1 unit. Open circles are placed at -5 and 5. Lines extend from these circles to the right and left ends of the number line, respectively.
- 6) $k > 1$ or $k < -1$: A number line from -6 to 6 with tick marks every 1 unit. Open circles are placed at -1 and 1. Lines extend from these circles to the right and left ends of the number line, respectively.
- 7) $x \leq -12$ or $x \geq 2$: A number line from -16 to 4 with tick marks every 4 units. Solid dots are placed at -12 and 2. Lines extend from these dots to the left and right ends of the number line, respectively.
- 8) $-6 \leq n \leq 14$: A number line from -8 to 16 with tick marks every 2 units. Solid dots are placed at -6 and 14. Lines extend from these dots to the left and right ends of the number line, respectively.
- 9) $-6 \leq x \leq 0$: A number line from -9 to 3 with tick marks every 1 unit. Solid dots are placed at -6 and 0. Lines extend from these dots to the left and right ends of the number line, respectively.
- 10) $p \geq 10$ or $p \leq -2$: A number line from -6 to 14 with tick marks every 2 units. Solid dots are placed at -2 and 10. Lines extend from these dots to the left and right ends of the number line, respectively.
- 11) $-3 \leq v \leq 3$: A number line from -7 to 5 with tick marks every 1 unit. Solid dots are placed at -3 and 3. Lines extend from these dots to the left and right ends of the number line, respectively.
- 12) $n \geq -1$ or $n \leq -5$: A number line from -10 to 2 with tick marks every 2 units. Solid dots are placed at -5 and -1. Lines extend from these dots to the left and right ends of the number line, respectively.
- 13) $-1 < x < 11$: A number line from -2 to 14 with tick marks every 1 unit. Open circles are placed at -1 and 11. Lines extend from these circles to the right and left ends of the number line, respectively.
- 14) $a < -5$ or $a > 15$: A number line from -8 to 20 with tick marks every 4 units. Open circles are placed at -5 and 15. Lines extend from these circles to the left and right ends of the number line, respectively.
- 15) $r \leq 0$ or $r \geq 2$: A number line from -6 to 6 with tick marks every 1 unit. Solid dots are placed at 0 and 2. Lines extend from these dots to the left and right ends of the number line, respectively.
- 16) $0 \leq x \leq 4$: A number line from -2 to 10 with tick marks every 1 unit. Solid dots are placed at 0 and 4. Lines extend from these dots to the left and right ends of the number line, respectively.