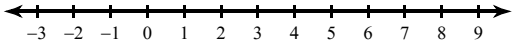
Graph compound inequalities on a number line Name_____

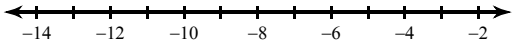
Date_____

Solve each compound inequality and graph its solution.

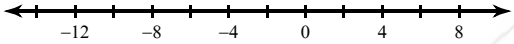
1) $2 \le n + 1 \le 3$



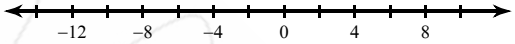
2) $\frac{a}{6} \ge -1$ or $-9a \ge 81$



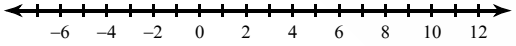
3) $\frac{m}{9} < -1$ or $\frac{m}{6} \ge 1$



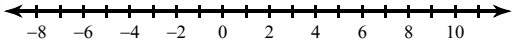
4) $\frac{x}{10} \le -1$ or $-5 + x > 1$



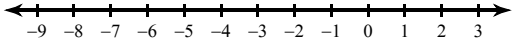
5) $-6 \le n - 2 < 7$



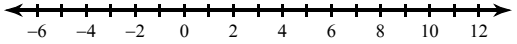
6) $\frac{n}{4} \le -1$ or $-4n < -28$



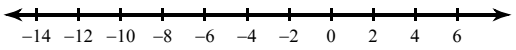
7) $1 + n > -6$ and $\frac{n}{6} < -1$



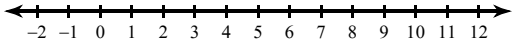
8) $x - 1 > -5$ and $\frac{x}{3} < 3$



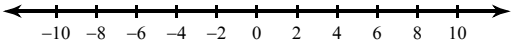
9) $\frac{n}{10} < -1$ or $9n \geq 27$



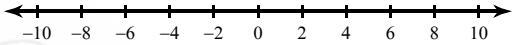
10) $36 > 4p > 0$



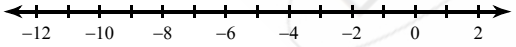
11) $-2 < \frac{p}{5} < 2$



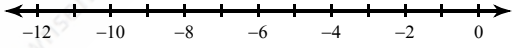
12) $-1 < \frac{k}{9} \leq 1$



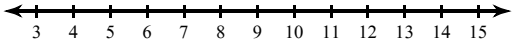
13) $4a > -4$ or $a + 10 < 3$



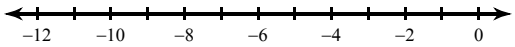
14) $r - 1 \leq -5$ and $-4r \leq 32$



15) $\frac{a}{8} \geq 1$ or $\frac{a}{7} < 1$

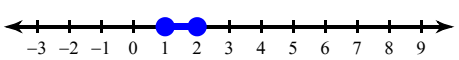


16) $-2a \geq 8$ and $3a \geq -15$

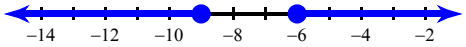


Answers to

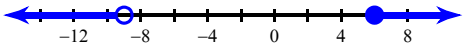
1) $1 \le n \le 2$:



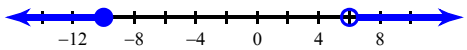
2) $a \ge -6$ or $a \le -9$:



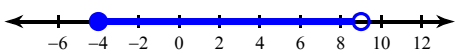
3) $m < -9$ or $m \ge 6$:



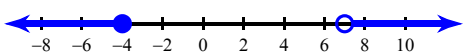
4) $x \le -10$ or $x > 6$:



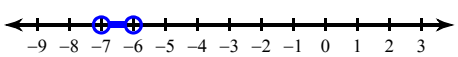
5) $-4 \le n < 9$:



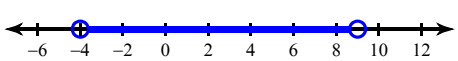
6) $n \le -4$ or $n > 7$:



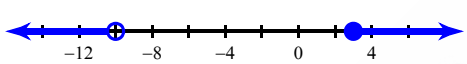
7) $-7 < n < -6$:



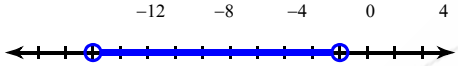
8) $-4 < x < 9$:



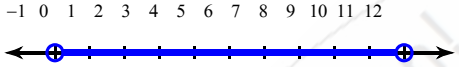
9) $n < -10$ or $n \ge 3$:



10) $0 < p < 9$:

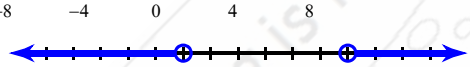


11) $-10 < p < 10$:

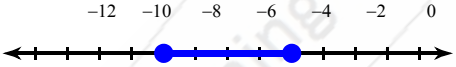


12) $-9 < k \le 9$:

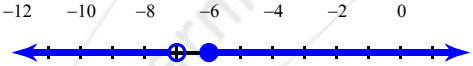
13) $a > -1$ or $a < -7$:



14) $-8 \le r \le -4$:



15) $a \ge 8$ or $a < 7$:



16) $-5 \le a \le -4$: