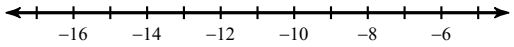
Algebra 1A Name_____ ID: 1

Compound Inequalities - Special Cases (AND)

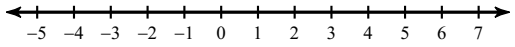
Date_____ Period____

Solve each compound inequality and graph its solution.

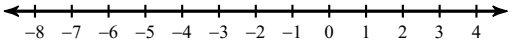
1) $-12x - 7 > -139$ and $9x - 10 < -100$



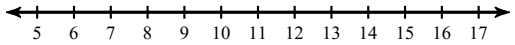
2) $11 + 11a > -33$ and $10 + 4a \geq 26$



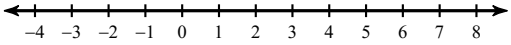
3) $17 \leq -3 + 5m < 12$



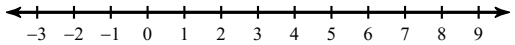
4) $-5n - 8 \leq -68$ and $9n - 9 \geq 45$



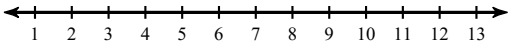
5) $20 \leq 9x + 2 \leq -61$



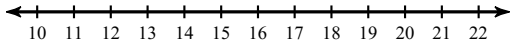
6) $5m + 10 > 10$ and $8m + 11 > -85$



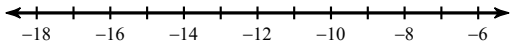
7) $5x - 1 \geq -21$ and $5x + 5 > 25$



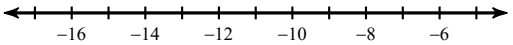
8) $2 - 3r \leq 29$ and $-2 - 2r \leq -26$



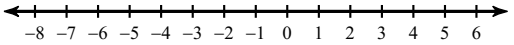
9) $15n - 2 \leq -15 + 14n$ and $5n - 17 > 11n + 13$



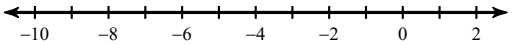
10) $15n + 6 < 9 + 15n$ and $18n + 6 \leq -16 + 16n$



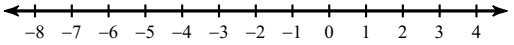
11) $19b - 11 < 12b + 17 \leq 7 + 14b$



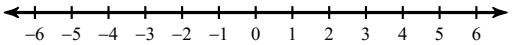
12) $9n - 4 < 4 + 7n \leq 5n - 6$



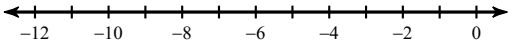
13) $5a - 1 \leq 3a - 1 < 11a - 9$



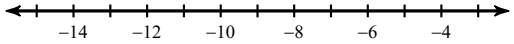
14) $9p + 9 \leq 9p + 17$ and $5 + 10p < 6p + 5$



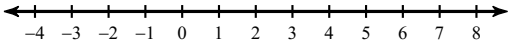
15) $-13a - 1 \leq 6 - 12a < 12 - 12a$



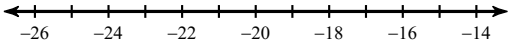
16) $-1 + 10n > 8 + 11n$ and $11n + 18 > 15n - 18$



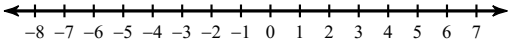
17) $10 + 17x > 6 + 15x$ and $4x - 11 \leq 5x - 16$



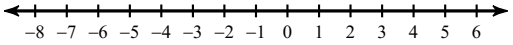
18) $6n - 20 \geq 7n - 15 \geq 1 + 8n$



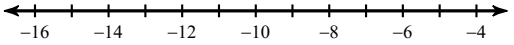
19) $18 \leq 12 - 6x < -60$



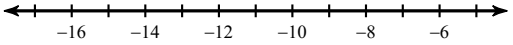
20) $-78 \leq -12b - 6 \leq -90$



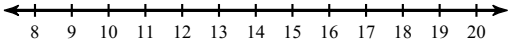
21) $15a - 5 \geq -305$ and $8 + 17a > -162$



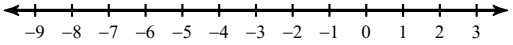
22) $18n - 19 < -145$ and $2 - 13n \geq -180$



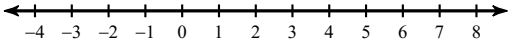
23) $19 + 20b \geq 339$ and $10 + 4b \geq -22$



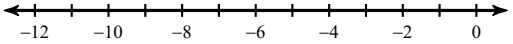
24) $9k - 11 \geq -20$ and $1 - 4k < 69$



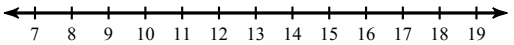
25) $2r + 9 > 9$ and $6 - 6r \geq 24$



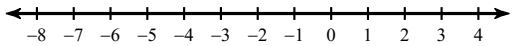
26) $9v - 1 < -64$ and $6v - 7 \leq 17$



27) $3x - 6 > 21$ and $10x + 7 \geq 107$



28) $2k - 7 < 11$ and $-2k - 9 > -11$



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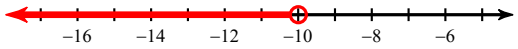

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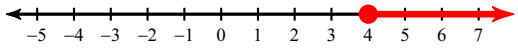
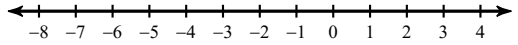


$a \geq 4$

3) $17 \leq -3 + 5m < 12$



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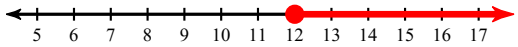

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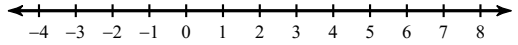

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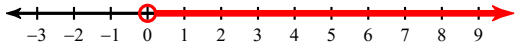
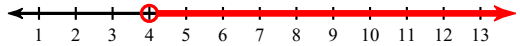
6) $5m + 10 > 10$ and $8m + 11 > -85$



$m > 0$

7) $5x - 1 \geq -21$ and $5x + 5 > 25$



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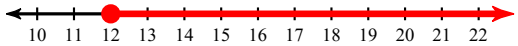
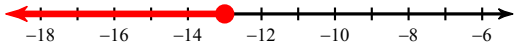


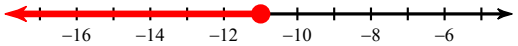
$r \geq 12$

9) $15n - 2 \leq -15 + 14n$ and $5n - 17 > 11n + 13$



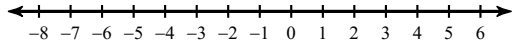
$n \leq -13$

10) $15n + 6 < 9 + 15n$ and $18n + 6 \leq -16 + 16n$



$n \leq -11$

11) $19b - 11 < 12b + 17 \leq 7 + 14b$



No solution.

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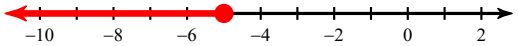
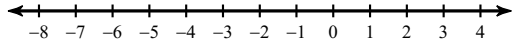


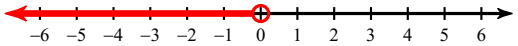
$n \leq -5$

13) $5a - 1 \leq 3a - 1 < 11a - 9$



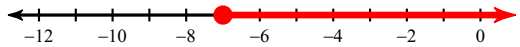
No solution.

14) $9p + 9 \leq 9p + 17$ and $5 + 10p < 6p + 5$



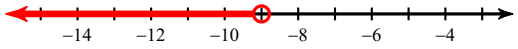
$p < 0$

15) $-13a - 1 \leq 6 - 12a < 12 - 12a$



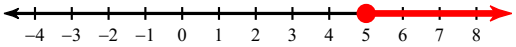
$a \geq -7$

16) $-1 + 10n > 8 + 11n$ and $11n + 18 > 15n - 18$



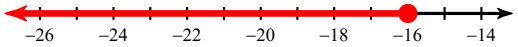
$n < -9$

17) $10 + 17x > 6 + 15x$ and $4x - 11 \leq 5x - 16$



$x \geq 5$

18) $6n - 20 \geq 7n - 15 \geq 1 + 8n$



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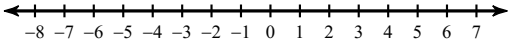

No solution.

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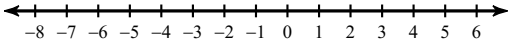

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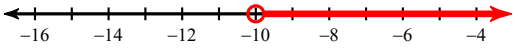
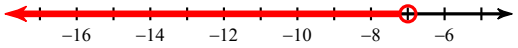


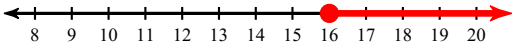
$a > -10$

22) $18n - 19 < -145$ and $2 - 13n \geq -180$



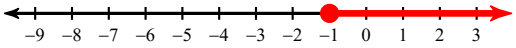
$n < -7$

23) $19 + 20b \geq 339$ and $10 + 4b \geq -22$



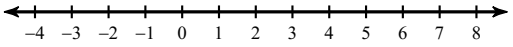
$b \geq 16$

24) $9k - 11 \geq -20$ and $1 - 4k < 69$



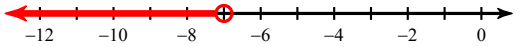
$k \geq -1$

25) $2r + 9 > 9$ and $6 - 6r \geq 24$



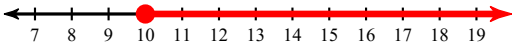
No solution.

26) $9v - 1 < -64$ and $6v - 7 \leq 17$



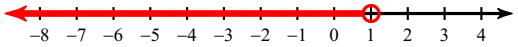
$v < -7$

27) $3x - 6 > 21$ and $10x + 7 \geq 107$



$x \geq 10$

28) $2k - 7 < 11$ and $-2k - 9 > -11$



$k < 1$