

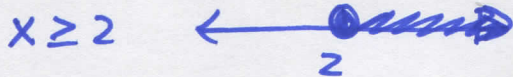
2.8 Solving Linear Inequalities CYU DAY ONE

Use when you get it right all by yourself
S Use when you did it all by yourself, but made a silly mistake
H Use when you could do it alone with a little help from teacher or peer
G Use when you completed the problem in a group
X Use when a question was attempted but wrong (get help)
N Use when a question was not even attempted

CONCEPTS	BASIC	INTERMEDIATE	ADVANCED
Graphing inequalities	1 - 10	11 - 20	21 - 28
Interval notation	1 - 10	11 - 20	21 - 28
Solving Inequalities	11 - 16	17 - 20	21 - 28

Graph each set of numbers given in interval notation. Then write an inequality statement in x describing the numbers graphed.

1. $(2, \infty)$



3. $(-\infty, -5)$



2. $(-3, \infty)$

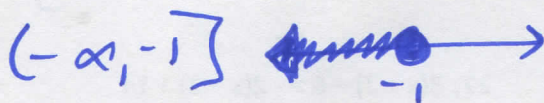


4. $(-\infty, 4]$



Graph each inequality on a number line. Then write the solutions in interval notation.

5. $x \leq -1$



8. $z < -\frac{2}{3}$



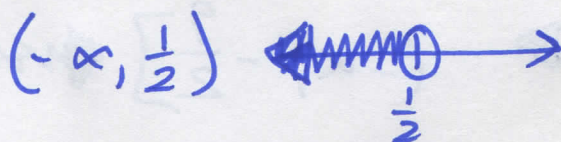
6. $y < 0$



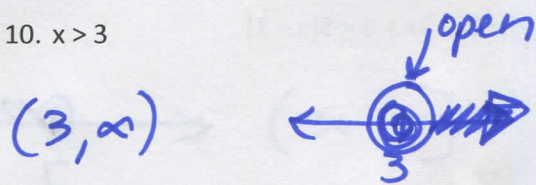
9. $y \geq 5$



7. $x < \frac{1}{2}$



10. $x > 3$



Solve each inequality. Graph the solution set and write it in interval notation.

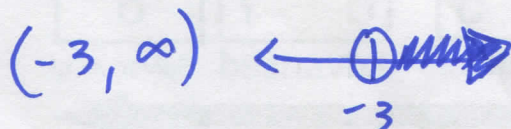
11. $2x < -6$



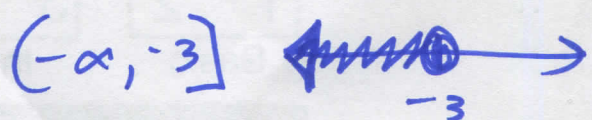
13. $x - 2 \geq -7$



12. $3x > -9$



14. $x + 4 \leq 1$



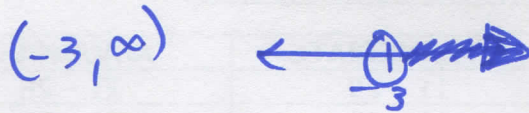
15. $-8x \leq 16$



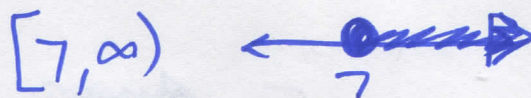
16. $-5x < 20$



17. $3x - 5 > 2x - 8$



18. $3 - 7x \geq 10 - 8x$



19. $4x - 1 \leq 5x - 2x$



20. $7x + 3 < 9x - 3x$



21. $x - 7 < 3(x + 1)$



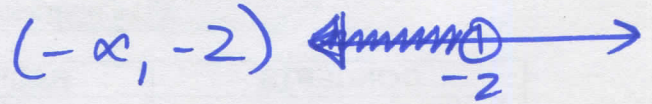
22. $3x + 9 \leq 5(x - 1)$



23. $-6x + 2 \geq 2(5 - x)$



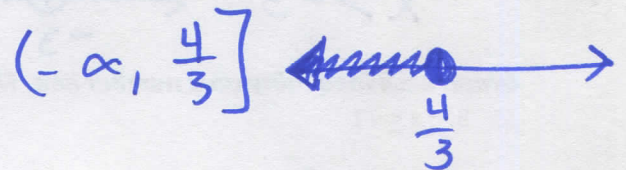
24. $-7x + 4 > 3(4 - x)$



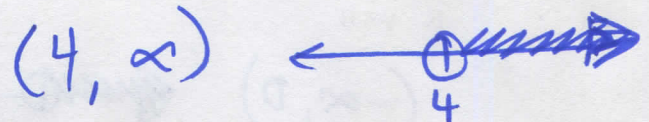
25. $4(3x - 1) \leq 5(2x - 4)$



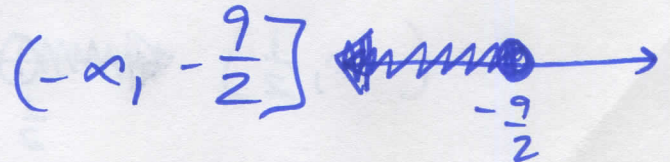
26. $3(5x - 4) \leq 4(3x - 2)$



27. $3(x + 2) - 6 > -2(x - 3) + 14$



28. $7(x - 2) + x \leq -4(5 - x) - 12$



CYU Reflection: How far can you go: basic, intermediate, or advanced?

Rate your mastery level!

How confident are you with the skills this CYU covered? Circle the score you would give yourself.

