: OH D. 41	WRITING COMPOUND INEQUALITIES Write the compound inequality that is represented by the graph.		
for Exs. 11–21	11. -4 -3 -2 -1 0	1 2 12.	
	(13) -6 -4 -2 0 2	4 6 14. $-6 -3$	→ → → → → → → → → →
	15. WMIKERER SOUNCE What compound inequality is graphed below?		
	(A) -1 < x < 3	(B) $x \le -1$ or	<i>x</i> > 3
	(c) $x < -1 \text{ or } x \ge 3$ (b) $x > -1 \text{ or } x \le 3$		
	GRAPHING COMPOUND INEQUALITIES Graph the compound inequality.		
	16. $2 \le x \le 5$	17. $-3 < x < 4$	18. $5 \le x < 10$
	19. $x < 0$ or $x > 2$	20. $x \le -1$ or $x > 1$	21. $x > -2$ or $x < -5$
EXAMPLES 3 and 4 on pp. 42–43 for Exs. 22–35	SOLVING INEQUALITIES Solve the inequality. Then graph the solution.		
	22. $x + 4 > 10$	23. $x - 3 \le -5$	24. $4x - 8 \ge -4$
	25. $15 - 3x > 3$	26. $11 + 8x \ge 7$	27. $4 + \frac{3}{2}x \le 13$
	28. $2x - 6 > 3 - x$	29. $4x + 14 < 3x + 6$	30. $5 - 8x \le 19 - 10x$
	31. $21x + 7 < 3x + 16$	32. $18 + 2x \le 9x + 4$	33. $2(x-4) > 4x+6$
	ERROR ANALYSIS <i>Describe</i> and correct the error in solving the inequality.		
	34. $2x + 8 < 6x - 4$	35. 10 + 3v	5
	-4x < -12	10	< 24
	$-4x \le -12$	10	< 2x
	$-4x \le -12$ $x \le 3$	10	< 2x < x
	$-4x \le -12$ $x \le 3$ 36. CORRECTION OF the that have a solution of $x > 3$	ite two different inequalities of 5.	< 2x < x the form $ax + b > c$
EXAMPLE 5	$-4x \le -12$ $x \le 3$ 36. COPERS ENDSORMATH Wr that have a solution of $x > 3$	10 10 10 5 ite two different inequalities of 5. Solve the inequality. Then g	< $2x$ < x the form $ax + b > c$ raph the solution.
EXAMPLE 5 on p. 43 for Exs. 37–42	$-4x \le -12$ $x \le 3$ 36. COPERS ENDSOMMETH Wr that have a solution of $x > 3$ "AND" COMPOUND INEQUALITIE 37. $-5 < x + 1 < 4$	ite two different inequalities of 5. Solve the inequality. Then g 38. $2 \le x - 3 \le 6$	<pre>< 2x < x</pre> the form $ax + b > c$ raph the solution. 39. $-3 < 4 - x \le 3$
EXAMPLE 5 on p. 43 for Exs. 37–42	$-4x \le -12$ $x \le 3$ 36. COPERS ENDSOMMATH Wr that have a solution of $x > 3$ *AND" COMPOUND INEQUALITIE 37. $-5 < x + 1 < 4$ 40. $2 < 3x - 1 \le 6$	ite two different inequalities of 5. Solve the inequality. Then g 38. $2 \le x - 3 \le 6$ 41. $-4 \le 2 + 4x < 0$	$ < 2x < x the form ax + b > c raph the solution. 39. -3 < 4 - x \le 3 42. 0 \le \frac{3}{4}x + 3 \le 4 $
EXAMPLE 5 on p. 43 for Exs. 37–42 EXAMPLE 6	$-4x \le -12$ $x \le 3$ 36. COMPOUND INEQUALITIES 37. $-5 < x + 1 < 4$ 40. $2 < 3x - 1 \le 6$	ite two different inequalities of 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5.	$< 2x$ $< x$ the form $ax + b > c$ raph the solution. $393 < 4 - x \le 3$ $42. 0 \le \frac{3}{4}x + 3 \le 4$ aph the solution.
EXAMPLE 5 on p. 43 for Exs. 37–42 EXAMPLE 6 on p. 43 for Exs. 43–48	$-4x \le -12$ $x \le 3$ 36. COMPOUND INEQUALITIES 37. $-5 < x + 1 < 4$ 40. $2 < 3x - 1 \le 6$ COMPOUND INEQUALITIES 43. $x + 1 < -3$ or $x - 2 > 0$	ite two different inequalities of 5. Solve the inequality. Then g 38. $2 \le x - 3 \le 6$ 41. $-4 \le 2 + 4x < 0$ Solve the inequality. Then gray 44. $x - 4 \le -6$	$< 2x$ $< x$ the form $ax + b > c$ raph the solution. $393 < 4 - x \le 3$ $42. 0 \le \frac{3}{4}x + 3 \le 4$ aph the solution. for $x + 2 > 5$
EXAMPLE 5 on p. 43 for Exs. 37–42 EXAMPLE 6 on p. 43 for Exs. 43–48	36. COMPOUND INEQUALITIES 37. $-5 < x + 1 < 4$ 40. $2 < 3x - 1 \le 6$ 37. $-5 < x + 1 < 4$ 40. $2 < 3x - 1 \le 6$ 43. $x + 1 < -3$ or $x - 2 > 0$ 45. $2x - 3 \le -4$ or $3x + 1 \ge 4$	ite two different inequalities of 5. Solve the inequality. Then g 38. $2 \le x - 3 \le 6$ 41. $-4 \le 2 + 4x < 0$ Solve the inequality. Then gray 44. $x - 4 \le -6$ 46. $2 + 3x < -6$	< 2x < x
EXAMPLE 5 on p. 43 for Exs. 37–42 EXAMPLE 6 on p. 43 for Exs. 43–48	$-4x \le -12$ $x \le 3$ 36. COMPOUND INEQUALITIE 37. $-5 < x + 1 < 4$ 40. $2 < 3x - 1 \le 6$ *OR* COMPOUND INEQUALITIES 43. $x + 1 < -3$ or $x - 2 > 0$ 45. $2x - 3 \le -4$ or $3x + 1 \ge 4$ 47. $0.3x - 0.5 < -1.7$ or $0.4x \ge 2$	ite two different inequalities of 5. Solve the inequality. Then g 38. $2 \le x - 3 \le 6$ 41. $-4 \le 2 + 4x < 0$ Solve the inequality. Then gr 44. $x - 4 \le -6$ 46. $2 + 3x < -6$ 48. $-x - 4 \ge 1$	$ < 2x < x the form ax + b > c raph the solution. 39. -3 < 4 - x \le 3 42. 0 \le \frac{3}{4}x + 3 \le 4 aph the solution. 6 or x + 2 > 5 -13 or 4 + 2x > 7 1 or 2 - 5x \le -8 $
EXAMPLE 5 on p. 43 for Exs. 37–42 EXAMPLE 6 on p. 43 for Exs. 43–48	$-4x \le -12$ $x \le 3$ 36. COMPOUND INEQUALITIES $375 < x + 1 < 4$ 40. $2 < 3x - 1 \le 6$ COMPOUND INEQUALITIES $43. x + 1 < -3 \text{ or } x - 2 > 0$ 45. $2x - 3 \le -4 \text{ or } 3x + 1 \ge 4$ 47. $0.3x - 0.5 < -1.7 \text{ or } 0.4x \ge 2$ CHALLENCE Solve the inequality is always true, write	ite two different inequalities of 5. 5. 5. 5. 5. 5. 5. 5. 5. 5.	$< 2x$ $< x$ the form $ax + b > c$ raph the solution. $393 < 4 - x \le 3$ $42. 0 \le \frac{3}{4}x + 3 \le 4$ aph the solution. for $x + 2 > 5$ $-13 \text{ or } 4 + 2x > 7$ tor $2 - 5x \le -8$ e no solution. If the