



Solving Compound Inequalities

Solve each inequality and graph its solution. Find the solution in the Answer Bank. When you find a match, place the question number next to the color. Color the picture accordingly to reveal the mystery picture!

1. $-5 \leq x - 1 < 4$	2. $10x \geq 80$ or $9x \leq -72$	3. $-11 \leq 4x - 7 \leq 5$	4. $x + 1 \geq 9$ or $8x - 5 \leq 11$
5. $-1 \leq \frac{x}{5} \leq 1$	6. $\frac{x}{7} > 0$ or $-6x > 54$	7. $54 < 4 + 10x < 94$	8. $5x - 3 > 47$ or $-x + 1 > 9$
9. $3 < x + 8 < 7$	10. $-6 + x > -13$ or $x - 4 < -12$	11. $19 < 4x - 9 \leq 31$	12. $3 + 3x > 15$ or $6x - 8 < -44$

Answer Bank:

Yellow Qs: _____	Black Qs: _____	Green Qs: _____	Purple Qs: _____
$-1 \leq x \leq 3$	$x \geq 8 \text{ or } x \leq 2$	$-9 < x < -5$	$x > -7 \text{ or } x < -8$
$x \geq 7 \text{ or } x < -3$	$11 < x < 15$	$-5 < x < -1$	$5 < x < 9$
$-5 \leq x \leq 5$	$x > 0 \text{ or } x < -9$	$4 \leq x \leq 7$	$x < 1 \text{ or } x \geq 2$
$7 \leq x \leq 9$	$-3 < x < 3$	$-4 \leq x < 5$	$7 < x \leq 10$
$x \geq 70 \text{ or } x \leq -81$	$x \geq 8 \text{ or } x \leq -8$	$x > 4 \text{ or } x < -6$	$x > 10 \text{ or } x < -8$

8	11	10	6	4	2	2	4	2	6	4	6	8	10	8
10	8	2	4	6	2	6	4	6	4	2	6	4	8	11
11	10	4	1	2	7	2	9	6	9	4	1	2	11	10
11	8	12	9	1	9	7	1	12	7	9	12	1	10	8
8	7	1	3	3	5	1	7	9	3	5	5	9	9	11
1	2	7	5	6	3	9	12	7	3	2	3	12	6	12
7	6	9	5	4	5	1	7	12	5	4	3	7	6	12
8	9	12	3	5	5	9	12	7	3	3	5	12	9	8
8	10	7	9	1	9	1	7	9	12	12	9	7	10	11
10	11	1	12	7	12	7	12	9	1	12	1	12	8	10
8	8	9	7	2	7	2	12	4	1	6	12	1	8	10
8	11	12	9	4	6	2	6	6	2	4	7	9	11	8
11	10	11	1	2	1	4	12	4	1	6	9	8	10	11
10	8	10	1	9	7	1	7	9	12	12	7	10	11	8
8	8	10	11	10	12	7	1	12	9	8	11	10	8	10