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On each of the other two regions (individually) we have either:

1. $\sqrt{3x+1} > 5$ for *every* value on the region (no solutions) OR 2. $\sqrt{3x+1} < 5$ for *every* value on the region (all solutions)

Example: Find the solution(s) to:

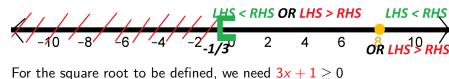
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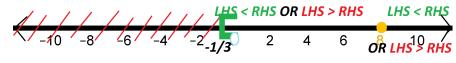
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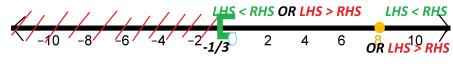


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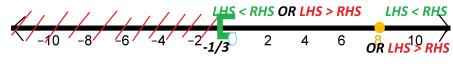
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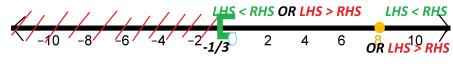
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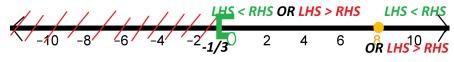
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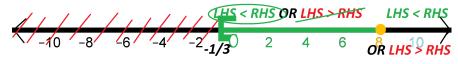
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From the region $\frac{-1}{3} \le x < 8$, we can pick the number x = 0

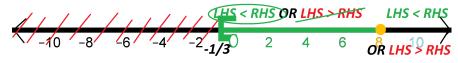
For
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x = 0 is a solution. Every $\frac{-1}{3} \le x < 8$

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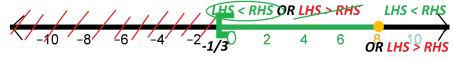
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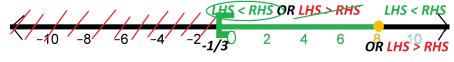
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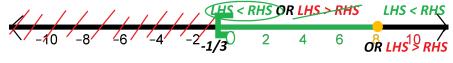
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From the region x > 8, we can pick the number x = 10

For
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x = 10 is not a solution. So, there's no solution for x > 8

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Conclusion: The solutions to $\sqrt{3x+1} \le 5$ are: $\left[\frac{-1}{3}, 8\right]$