Solve each of the following equations.

|  |  |
| --- | --- |
| $$2x+3=15$$  | $$-2x+3=15$$ |
| We can think of the solutions of these equations as points on a number line. Place a dot on the number lines to indicate your solutions. |
|  |  |

An equation is a statement of a relationship between two equal values. An *inequality* is a statement of a relationship in which the value of one side is limited by the value of the other. Two inequalities are given below with a list of possible solutions. Check to see if each number is a solution to the inequality.

* If the number is a solution, write *yes* in the blank beside it. If not, write *no*.
* If the number is a solution, place a dot on the number line. If it is not a solution, place an *X* on the number line.

|  |
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| $$2x+3<15$$ |
| Number | Solution? |
| -3 |  |
| 4 |  |
| 5.5 |  |
| 6 |  |
| 6.5 |  |
| 9 |  |

|  |
| --- |
| $$-2x+3<15$$ |
| Number: | Solution? |
| -10 |  |
| -8 |  |
| -6.5 |  |
| -6 |  |
| -5.5 |  |
| -1 |  |



