Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Class Period \_\_\_\_\_\_\_\_\_\_\_\_\_\_

SOLVING INEQUALITIES

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Inequality  (Highlight the coefficient for each variable) | Solve the inequality  (Highlight the operations performed on each side) | Did you multiply or divide by a negative number? | Do you need to flip the inequality symbol? | Write the solution as an inequality | Describe the graph  **(Open or closed circle)**  **(Shaded left or right)** |
| x + 5 > 18 |  |  |  |  |  |
| x – 9 < -13 |  |  |  |  |  |
| 2x < 42 |  |  |  |  |  |
| > 7 |  |  |  |  |  |
| 2x + 8 < 24 |  |  |  |  |  |
| -3x + 4 > 21 |  |  |  |  |  |
| + 3 < 17 |  |  |  |  |  |
| 5 – 2x < -19 |  |  |  |  |  |

Follow Up Questions: Look for patterns in the chart to help you answer.

1. Do you always flip the inequality sign when solving an inequality?
2. When do you flip the inequality sign?