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| \*Learning Target: |
| \*Critical Content: |
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| **Inequality**  |  |
| **Addition Property of Inequalities** |
| If the \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_ is \_\_\_\_\_\_\_\_\_\_\_ to each side of a \_\_\_\_\_\_\_\_ inequality, the resulting inequality is also \_\_\_\_\_\_\_\_\_\_.For all numbers *a*, *b*, and *c*, the following are true:1.2. |
| **Subtraction Property of Inequalities** |
| If the \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_ is \_\_\_\_\_\_\_\_\_\_\_ to each side of a \_\_\_\_\_\_\_\_ inequality, the resulting inequality is also \_\_\_\_\_\_\_\_\_\_.For all numbers *a*, *b*, and *c*, the following are true:1.2. |
| **Examples** | 1) Solve $x-12\geq 8$ 1a) Solve $22>m-8$ 2) Solve $m+19>56$ |
| **Set Builder Notation** |  |
| **To graph inequalities on a number line:**1)2)3) |
| **Example** | 3) Solve $3a+6\leq 4a$. Then graph the solution set on a number line. |
| **Phrases for Inequalities** |
| $$<$$ | $$>$$ | $$\leq $$ | $$\geq $$ |
|  |  |  |  |
| **Examples** | 4) Felipe needs the temperature of his gecko’s basking spot to be at least 82 degrees. Currently the spot is 62.5 degrees. How much warmer does the spot need to be for the gecko? |