**ALGEBRAIC INEQUALITIES**

**Grades 6 – Algebra 1**

**Identify the appropriate grade level**

|  |  |  |
| --- | --- | --- |
| $$2+x>5$$ | $$2x + 1 > \frac{-x}{4}$$ | $$-25>7.2 x+1$$ |
| $-3 \left(2x + 7\right)\leq \frac{1}{2}x+2$  | $$-5x-\left(x+3\right)> -12$$ | $$2<x-3$$ |
| $$\frac{3}{4}x>5$$ | $$a-\left(-4\right)\geq 11$$ | $$2x+1 \leq -25$$ |
| Use an inequality to represent this situation: *“Jaxon works at least 4 hours per week mowing lawns.”* |

**ALGEBRAIC INEQUALITIES KEY**

**Grades 6 – Algebra 1**

|  |  |  |  |
| --- | --- | --- | --- |
| **SOL 6.14** | **SOL 7.13** | **SOL 8.18** | **A.5** |
| $$2+x>5$$ | $$\frac{3}{4}x>5$$ | $$2x + 1 > \frac{-x}{4}$$ | $$-3 \left(2x + 7\right)\leq \frac{1}{2}x+2$$ |
| $$a-\left(-4\right)\geq 11$$ | $$2x+1 \leq -25$$ | $$-5x-\left(x+3\right)> -12$$ |  |
| $$2<x-3$$ | $$-25>7.2 x+1$$ |  |  |
| Use an inequality to represent this situation:*“Jaxon works at least 4 hours per week mowing lawns.”* | * **Solve 2-step linear inequalities in one variable (using addition/subtraction/**

**multiplication/division)*** **Coefficients and numeric terms will be Rational (positive and negative)**
 | * **Solve Multi-step linear inequalities in one variable (up to 4 steps)**
* **Variables on both sides**
 | * **Solve Multi-step linear inequalities in one variable**
 |
| * **Represent a practical situation with a one variable inequality**
* **Solve 1-step linear inequalities in one variable (using addition/subtraction property of inequality)**
 |