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| **Content: Introducing Inequalities** | | | |
| Understands the difference between an equation and an inequality  “An equation has two expressions connected by an equal sign, indicating that the expressions have the same value. An inequality has two expressions connected by a <, >, ≤, or ≥ sign. If the sign is >, the expression on the left has a greater value than the expression on the right.” | Recognizes that inequalities have many solutions  “I know that *x* + 2 > 10 has many solutions as there are many values that make the inequality true; for example: 9, 100, 21.9.“ | Identifies whether a given value is a solution of an inequality  “5 is not a solution of the inequality  9.25*h* + 22 > 170 because 9.25(5) + 22 = 68.25 and 68.25 is not greater than 170.” | Uses solution of related linear equation to identify possible solutions of an inequality  “I know that the related equation  9.25*h* + 22 = 170 has the solution *h* = 16. So, the inequality 9.25*h* + 22 > 170 has the solution *h* > 16 because the expression on the left has to be greater than 170.” |
| **Observations/Documentation** | | | |
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| **Competency: Communicating & Representing** | | | |
| Identifies the meaning of inequality signs  **“**> means greater than and ≥ means greater than or equal to.” | Represents situations involving one operation using inequalities  Four times a number is less than or equal to 48.  “I can represent this with the inequality 4*n* ≤ 48.” | Represents situations involving more than one operation using inequalities  Three more than four times a number is greater than 48.  “I can represent this with the inequality 4*n* + 3 > 48.” | Flexibly writes inequalitieswith the variable on either side of the sign  “I can write two different inequalities to represent the situation: 2*n* ‒ 5 ≥ 18 and 18 ≤ 2*n* ‒ 5.” |
| **Observations/Documentation** | | | |
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