Patterns and Relations

Activity 9 Assessment

Introducing Inequalities

Content: Introducing Inequalities			
Understands the difference between an equation and an inequality	Recognizes that inequalities have many solutions	Identifies whether a given value is a solution of an inequality	Uses solution of related linear equation to identify possible solutions of 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."	"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."	"5 is not a solution of the inequality $9.25h + 22 > 170$ because $9.25(5) + 22 = 68.25$ and 68.25 is not greater than 170."	"I know that the related equation $9.25h + 22 = 170$ has the solution $h = 16$. So, the inequality $9.25h + 22 > 170$ has the solution $h > 16$ because the expression on the left has to be greater than 170."
Observations/Documentation			

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Activity 9 Assessment

Introducing Inequalities

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 $4n \leq 48$."	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 $4n + 3 > 48$."	Flexibly writes inequalities with the variable on either side of the sign "I can write two different inequalities to represent the situation: $2n - 5 \geq 18$ and $18 \leq 2n - 5$."
Observations/Documentation			