Patterning and Algebra

Activity 5 Assessment

Solving Linear Equations Algebraically

Solving Linear Equations Algebraically			
Creates an equation involving two operations and integers I started with the equation $x = -6$. I multiplied both sides by 8. $8x = -48$ Then, I added 15 to each side. $8x + 15 = -33$	Solves an equation of the form $ax + b = c$, where a, b, and c are integers, symbolically and checks solution $8x + 15 = -33$ To isolate the variable, I will subtract 15 from each side. $8x + 15 - 15 = -33 - 15$ $8x = -48$ To determine the value of x, I will divide each side by 8. $\frac{8x}{8} = \frac{-48}{8}$ $x = -6$	Solves an equation of the form $\frac{x}{a} + b = c$, where a, b, and c are integers and $a \neq 0$, symbolically and checks solution $\frac{x}{8} + 2 = 9$ To isolate the variable, I will subtract 2 from each side. $\frac{x}{8} + 2 - 2 = 9 - 2$ $\frac{x}{8} = 7$ To determine the value of x, I will multiply each side by 8. $8 \times \frac{x}{8} = 8 \times 7$ $x = 56$	Applies their understanding of writing and solving equations to a real-life scenario, including explaining what the solution represents Marcus is participating in the Terry Fox Run. Five people each sponsor them for the same amount of money. Marcus donates $10 of their own. In all, Marcus collects $110. How much did each person sponsor Marcus? My equation to represent this situation is: $5x + 10 = 110$ $5x + 10 - 10 = 100 - 10$ $5x = 100$ $\frac{5x}{5} = \frac{100}{5}$ $x = 20$
Observations/Documentation			

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