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| **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.   8*x* = –48  Then, I added 15 to each side.  8*x* + 15 = –33 | Solves an equation of the form  *ax* + *b* = *c*, where *a*, *b*, and *c* are integers, symbolically and checks solution  8*x* + 15 = –33  To isolate the variable, I will subtract 15 from each side.  8*x* + 15 – 15 = –33 – 15  8*x* = –48  To determine the value of *x*, I will divide each side by 8.  =  *x* = –6 | Solves an equation of the form  + *b* = *c*, where *a*, *b*, and *c* are  integers and *a* ≠ 0, symbolically and checks solution  + 2 = –9  To isolate the variable, I will subtract 2 from each side.  + 2 – 2 = –9 – 2  = –11  To determine the value of *x*, I will multiply each side by 8.  8 × = 8 × (–11)  *x* = –88 | 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:  5*x* + 10 = 110  5*x* + 10 – 10 = 100 – 10  5*x* = 100  =  *x* = 20  Each person sponsored Marcus $20. |
| **Observations/Documentation** | | | |
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