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| **Solving Equations Involving the Distributive Property** |
| Uses algebra tiles to represent an equation of the form *a*(*x* + *b*) = *c*I used tiles to model 3(*x* – 1) = –9. | Rewrites an equation of the form *a*(*x* + *b*) = *c* by expanding symbolically or dividing both sides by *a*3(*x* – 5) = –20 can be written as (3)(*x*) – (3)(5) = –20, or 3*x* – 15 = –20 | Solves an equation of the form *a*(*x* + *b*) = *c,* and checks their solutionI used the Distributive Property to rewrite 3(*x* – 5) = –20 as 3*x* – 15 = –20.I added 15 to each side:3*x* – 15 + 15 = –20 + 15 3*x* = –5I divided both sides by 3: =  *x* = −I substituted − for *x* in the equation 3*x* – 15 = –20:L.S. = 3(−) – 15  = –5 – 15 = –20R.S. = –20L.S. = R.S. My solution is correct. | Determines whether a worked solution for an equation of the form *a*(*x* + *b*) = *c* is correct and fixes any mistakes –2(*x* – 4) = 12 –2*x* – 8 = 12–2*x* – 8 + 8 = 12 + 8 –2*x* = 20 *x* = –10The error in this solution happens in the first step. (–2)(–4) is +8, not –8. The corrected solution is: –2(*x* – 4) = 12 –2*x* + 8 = 12–2*x* + 8 – 8 = 12 – 8 –2*x* = 4 *x* = –2To check, I substitute –2 for *x* in the equation.L.S. = –2(–2 – 4)  =–2(–6)  = 12R.S. = 12L.S. = R.S. |
| **Observations/Documentation** |
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