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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 solution  I 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* = –5  I divided both sides by 3:  =  *x* = −  I substituted − for *x* in the equation  3*x* – 15 = –20:  L.S. = 3(−) – 15  = –5 – 15  = –20  R.S. = –20  L.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* = –10 The 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* = –2  To check, I substitute –2 for *x*  in the equation. L.S. = –2(–2 – 4)   =–2(–6)  = 12  R.S. = 12  L.S. = R.S. |
| **Observations/Documentation** | | | |
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