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| **Working with Linear Patterns** | | | |
| Determines missing terms in a pattern  Determine the numbers to complete this linear pattern.  85, 79, 73, \_\_\_\_, 61, \_\_\_  “Every term is 6 less than the previous term. So, I can find the missing terms by subtracting. The pattern is:  85, 79, 73, 67, 61, 55” | Uses a pattern rule to predict terms far ahead in a pattern    “The initial value is 1 and the constant change is 3. So, the pattern rule is 3*n*+ 1. To determine how many tiles would be in term 50,  I substitute 50 for *n*. 3(50) + 1 = 150 + 1  = 151 There would be 151 tiles in term 50.” | Uses a pattern rule to determine the term number given a term value    ”The pattern rule is 3*n*+ 1. To determine which term has 100 tiles,  I need to find a value for *n* that makes 3*n*+ 1 equal to 100.  I know that 3 33 = 99, and 99 + 1 = 100. So, the answer is term 33.” | Creates and uses an algebraic pattern rule to model and solve  a problem  Maha pays $20 every month for a gym membership, plus $3 for each class they attend. If Maha attends  15 classes one month, how much will they pay?  “I can represent this with the expression 3*n*+ 20 where *n* is the number of classes.  I substitute 15 for *n*.  3*n* + 20 = 3(15) + 20  = 45 + 20  = 65  Maha will pay $65.” |
| **Observations/Documentation** | | | |
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