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| **Working with Linear Patterns** | | | |
| Determines missing terms in a pattern  Determine the numbers to complete this 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 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 = 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 every class. If Maha pays $65 one month, how many classes did they attend?  “I can represent this with the expression 3*n*+ 20 where *n* is the number of classes. I need to find a value for *n* so that  3*n* + 20 = 65. I’ll try *n*= 10.  3(10) + 20 = 30 + 20   = 50 This is too small. I’ll try *n* = 15.  3(15) + 20 = 45 + 20  = 65 Maha went to 15 classes that month.” |
| **Observations/Documentation** | | | |
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