

# Activity 8 Assessment Consolidation

## Generalizing and Representing Increasing and Decreasing Patterns

Recognizes that a pattern increases or decreases



"The terms are getting bigger."

Identifies how a pattern changes (describes rule)



"To get from the first term to the second term, and from the second term to the third term, we add 2 tiles. The pattern grows by 2 tiles each time."

Represents patterns symbolically and writes rules using addition or subtraction

1, 3, 5, ...  
"Start at 1 and add 2 each time."  
17, 14, 11, ...  
"Start at 17 and take away 3 each time."

Extends patterns using repeated addition and subtraction

1, 3, 5, 7, 9, 11, ...  
"I added 2 over and over."  
17, 14, 11, 8, 5, 2  
"I subtracted 3 over and over."

## Observations/Documentation

# Activity 8 Assessment Consolidation

## Generalizing and Representing Increasing and Decreasing Patterns (cont'd)

Finds missing terms or errors in patterns

3, 8, 13, 18, 22, 28, ....  
 "Start at 3 and add 5 each time.  
 $18 + 5 = 23$ , so 22 should be 23."

Creates number patterns and identifies finite and infinite whole-number sequences

"85, 75, 65, 55, ....  
 "I skip-counted back by 10s.  
 All the numbers are odd.  
 It is a finite sequence because I will run out of numbers."

Uses patterns to solve problems

"If I save 2 quarters a day, when will I have 10 quarters?  
 2, 4, 6, 8, 10  
 I will have 10 quarters after 5 days."

Identifies and extends patterns involving multiplication

<b>Input</b>	1	2	3	4	5
<b>Output</b>	2	4	6	8	10

"Each input number is multiplied by 2."

## Observations/Documentation