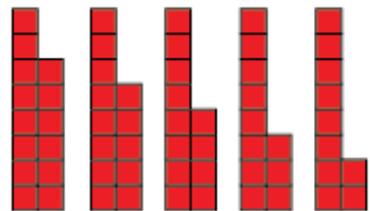# Activity 2 Assessment
Investigating Numeric Sequences

Investigating Arithmetic Sequences

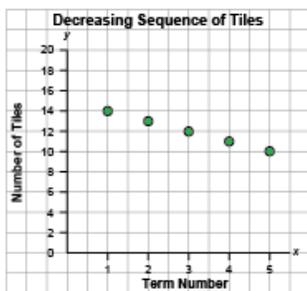| Identifies how an arithmetic sequence increases or decreases and describes the initial term and constant change	Represents arithmetic sequences in tables of values and on graphs	Identifies a rule that relates the positions and terms of an arithmetic sequence

Term 1   Term 2   Term 3   Term 4   Term 5

"This is a decreasing sequence.
Initial term: 14 red tiles;
Constant change: take away 1 red tile."

Term Number	Number of Tiles
1	14
2	13
3	12
4	11
5	10

Decreasing Sequence of Tiles

"The table and graph show the number of tiles decreases by 1 each time. The points on the graph lie on a straight line that goes down to the right."

Term Number	Number of Tiles
1	14
2	13
3	12
4	11
5	10

"By looking at the table, I see that the number of tiles is equal to 15 minus the term number."

Observations/Documentation

Activity 2 Assessment
Investigating Numeric Sequences

Investigating Arithmetic Sequences (cont'd)

Writes an algebraic expression that relates the positions and terms of an arithmetic sequence	Determines the missing term in an arithmetic sequence (using expression)	Fluently identifies, creates, and extends various arithmetic sequences to solve real-life problems

<table>
<tr><td colspan="2">

Term Number	Number of Tiles
1	14
2	13
3	12
4	11
5	10

</td><td colspan="2">

Term Number	Term Value
1	8
2	16
3	?
4	32
5	?
6	48

</td><td>

Box	Cost to Ship ($)
1	3.50
2	7.00
3	10.50

</td></tr>
</table>

"The number of tiles is equal to 15 minus the term number. I can write this rule as $15 - n$, where n represents the term number."

"Rule: Multiply the term number by 8 to get the term value. I can write this rule as: $8n$, where n represents the term number.
Term 3: $8n = 8 \times 3$, or 24
Term 5: $8n = 8 \times 5$, or 40."

How much would it cost to ship 9 boxes?

"To determine the shipping cost, multiply the number of boxes by $3.50. I would use the expression $3.5n$, where n is the number of boxes:
$3.5n = 3.5 \times 9$, or 31.5
So, the cost to ship 9 boxes is $31.50."

Observations/Documentation

Mathology 5
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