

Problem of the Week

Patterns and Relations is significant in student mathematical understanding. It's imperative that students have opportunities to understand patterns and relations, as well as applying these concepts to solve problems. The tasks are meant to be open-ended so that discussion can support understanding.

Be mindful that during these prompts, it is important the teacher listens to student conversations and asks questions that illicit student thinking.

Primary	During recess, Ali and Monique each made patterns. Ali shared that she used 14 and 42 as two numbers in her number sequence. Monique shared that she also used 14 and 42 as two numbers in her number sequence. Ali said that Monique must have done something wrong because Monique's number sequence looked different than her number sequence. Is Ali correct or incorrect? How do you know?
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Elementary	<p>Talia and David had a disagreement about patterns. Talia said that she could make an input-output table using the following numbers:</p> <p>6 4 12 7 18 10 8 5 26 14</p> <p>David tried arranging the numbers into an input-output table, but was unable to find a way that fit an expression. He said that the numbers couldn't be arranged to fit an algebraic expression. Who is correct, Talia or David? How do you know?</p>
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Intermediate	<p>The following input-output table has 2 errors. There is one error in the input column and one error in the output column. Identify the errors and record the expression represented in the table.</p> <table border="1"><thead><tr><th>Input</th><th>Output</th></tr></thead><tbody><tr><td>5</td><td>22</td></tr><tr><td>14</td><td>45</td></tr><tr><td>12</td><td>39</td></tr><tr><td>21</td><td>65</td></tr><tr><td>19</td><td>60</td></tr></tbody></table>	Input	Output	5	22	14	45	12	39	21	65	19	60
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