Problem of the Week

The problems that follow focus on algebra. More specifically, students will explore patterns. 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	The fourth term in a pattern is 16. Can you create two patterns (repeating, increasing or decreasing) that each has 16 as a fourth term?

Elementary	Create an input-output table that meets the following criteria: • All numbers in the input and output columns are even. • The numbers in the input column are larger than the numbers in the output column. • The pattern rule consists of two steps. What is the pattern rule?

Intermediate	Create an equation that meets the following criteria: • One expression consists of one variable, a whole number coefficient and two operations. • The other expression consists of one variable, a whole number coefficient, a set of brackets and three operations. • The value of the variable is 4. Record and solve the equation.