

## EXPRESSIONS AND EQUATIONS: GRADE 6

The Grade 6 deck focuses on the standards in the Expressions and Equations domain, as presented in the Common Core document on pages 43–44. This deck extends students' thinking beyond expressing pattern relationships and working with ordered pairs. In the Expressions and Equations domain, students read, write, and evaluate expressions. They refer to the expressions by using the appropriate vocabulary, such as *sum*, *factor*, *quotient*, *term*, and *coefficient*. Students apply properties such as the distributive property to create equivalent expressions, and they solve equations and inequalities using one variable. Grade 6 students also work with variables and the relationship between independent and dependent variables using graphs and tables and show the connection with the equation.

Here are four cards that all have the same answer,  $x + 3$ .

The four cards are arranged in a 2x2 grid. Each card has a white background with a grey border and a grey shadow. The top card contains the text 'Three more than x' and a line for an expression. The second card shows three apples and a text prompt about Peter's apples. The third card shows a table with input-output pairs. The fourth card shows a number line with arrows indicating a shift of 3 units.

Input	Output
0	3
2	5
4	7

After students have found the solution to their own card, they then find the three other students who have the same answer. Once the four students have verified that they belong in the same group, they view the expression  $x + 3$  as it is represented on the different cards: in words, in a context, in a table, and on a number line.

Answers for the Grade 6 Expressions and Equations deck are provided on pages 10–12 of this guide.