Tools and Topics

Inspiring Connections Course 2, Chapter 6

Spotlight On: Data Chats

The ability to interpret data, make inferences, and draw conclusions is necessary for students to develop their critical thinking skills and determine whether claims are actually supported by the data used to make them. One way that students develop skills in analyzing and interpreting data is through Data Chats, where a relevant infographic is displayed and students are asked to make sense of trends or predictions.

The Big Picture

Growing From

Graphing data sets;
Building expressions

Working On

Collecting and graphing data sets;
Comparing data sets;
Equivalent expressions

Growing To

Standard deviation;
Solving equations;
Solving systems of equations

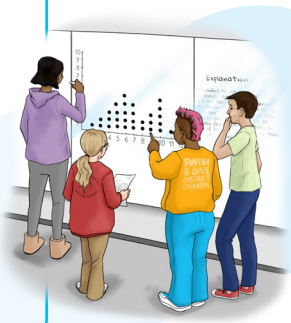
Need Help?

Methods & Meanings boxes are included in the Mathematician's Notebook as reference.

6.1.1: Describing Data Distributions
6.1.5: Comparing Distributions
6.2.1: Naming Algebra Tiles
6.2.2: Mathematical Properties
6.2.3: Combining Like Terms
6.2.4: Additive Inverse and Additive Identity
6.3.2: Distributive Property
6.3.3: Defining a Variable

Try This at Home!

Collect data with your student. For example, how long each sibling spends watching TV per week (in hours), or how late or early the bus arrives (in minutes). Then represent the data as a dot plot using stickers by creating a number line and placing a sticker above each number from the data you collected.

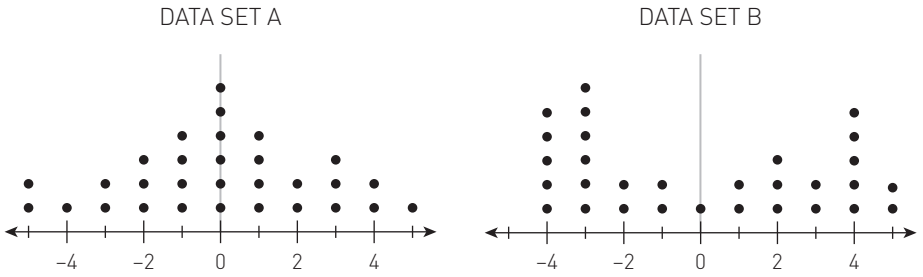


Current Topics

In this chapter, students will compare data sets that are represented visually. They will also continue building expressions and rewriting them in different forms. Below are a few examples.

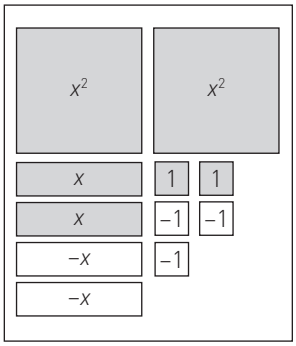
Data Distributions (Section 6.1)

In this section, students will practice interpreting data by comparing more than one data set. For example, both data sets shown have the same *mean*, 0. However, that value doesn't convey how spread out the points are in each data set. Looking at the two dot plots, the points in Data Set A appear to be clustered more closely around the mean than the points in Data Set B.



Numerical and Algebraic Expressions (Section 6.2)

Students will create equivalent expressions. Students will represent expressions using algebra tiles and show that two expressions are equivalent. For example, the algebra tiles shown can be represented as $2x + 4 - 2x - 3$. Expressions like $1 + (-1)$ and $(-x) + x$ create *zero pairs*. By removing *zero pairs* of algebra tiles, the original expression $(2x + 4 + (-2x) + (-3))$ can be rewritten as 1.



Equivalent Expressions (Section 6.3)

In this section, students will continue working with equivalent expressions by writing them in both expanded and factored form, using the *Distributive Property* to regroup terms in an expression. The Distributive Property can be verified with algebra tiles, as shown. The tiles can be grouped into 4 sets of $(x + 3)$, or $4(x + 3)$, or they can be grouped together as $4x + 12$.