5-2 ELL Support

Direct Variation

There are two sets of note cards below that show how Latoya finds a direct variation equation relating *x* and *y*. Suppose *y* varies directly with *x*, and *y* = 36 when *x* = 9. She also wants to find the value of *y* when *x* = 7. The set on the left explains her thinking. The set on the right shows the steps. Write the thinking and the steps in the correct order.

Think Cards

Start with the function form of a direct variation.

Divide each side by 9 to solve for *k*.

Find the value of *y* when x = 7.

Substitute 9 for *x* and 36 for *y*.

Write an equation. Substitute 4 for *k* in y = kx.

Write Cards

y = 4x

36 = k(9)

y = 4(7) = 28

y = kx

4 = k

Think

First, she should

Second, she should

Next, she should

Then, she should

Finally, she should

Write

Step 1

Step 2

Step 3

Step 4

Step 5