Scaffolded Practice 2.1.4

Example 1

Evaluate $f(x) = 4x - 7$ over the domain {1, 2, 3, 4}. What is the range?

1. To evaluate $f(x) = 4x - 7$ over the domain {1, 2, 3, 4}, substitute the values from the domain into $f(x) = 4x - 7$.

2. Evaluate $f(1)$.

3. Evaluate $f(2)$.

4. Evaluate $f(3)$.

5. Evaluate $f(4)$.

6. Collect the set of outputs from the inputs.

continued

Example 2

Evaluate $g(x) = 3^x + 1$ over the domain {0, 1, 2, 3}. What is the range?

Example 3

Raven started an online petition calling for more vegan options in the school cafeteria. So far, the number of signatures has doubled every day. She started with 32 signatures on the first day. Raven's petition can be modeled by the function $f(x) = 32(2)^x$. Evaluate $f(3)$ and interpret the results in terms of the petition.