

Name: _____

Date: _____

Scaffolded Practice: Comparing Functions Using Average Rate of Change

Use what you know about functions to complete each problem.

1. What does the **end behavior** of a function describe?
2. What does the symbol \rightarrow mean mathematically?

Describe the end behavior of the function $f(x) = ax$ for the following values of a .

3. $a > 0$
4. $a < 0$

Describe the end behavior of the function $f(x) = ax^2$ for the following values of a .

5. $a > 0$
6. $a < 0$

Describe the end behavior of the function $f(x) = ab^x$ for the following values of a and b .

7. $a > 0$ and $b > 1$,
8. $a > 0$ and $0 < b < 1$
9. $a < 0$ and $b > 1$
10. $a < 0$ and $0 < b < 1$