

For each function:

- a. Determine if it is growth or decay.
- b. Graph the function.
- c. Find the inverse function.
- d. Graph the inverse function.
- e. Find the line of symmetry.
- f. Find the domain and Range.
- g. Find the asymptotes.

1. $f(x) = 2^x$

2. $g(x) = (\frac{1}{2})^x$

3. $h(x) = (\frac{1}{4})^x$

4. $F(x) = 5^x$

5. $G(x) = (\frac{1}{5})^x$

6. $H(x) = 4^x$

7. Discuss relationships between these six functions.