

Exponential Functions 2 – Exponential Decay
Homework #7

Name _____
Per _____ Date _____

Tell whether the function represents exponential growth or exponential decay.

1. $f(x) = 5 \cdot \left(\frac{1}{8}\right)^{-x}$

2. $f(x) = 3\left(\frac{4}{3}\right)^x$

3. $f(x) = 8\left(\frac{2}{3}\right)^x$

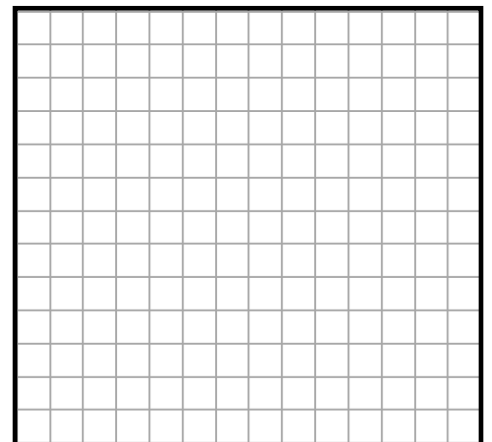
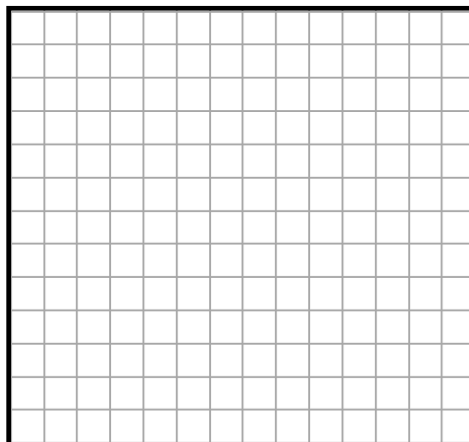
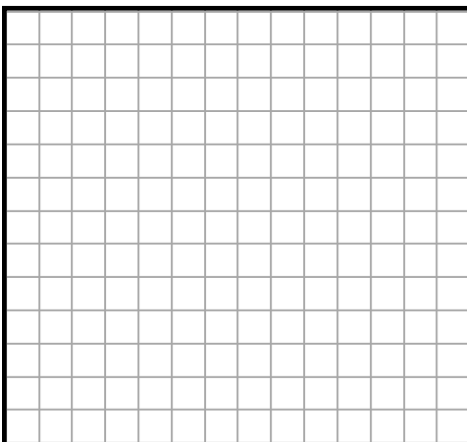
4. $f(x) = 8(0.25)^{-x}$

Graph the function. State the domain, range, asymptote, and y-intercept.

5. $f(x) = -2\left(\frac{1}{4}\right)^x$

6. $f(x) = 5\left(\frac{1}{4}\right)^x$

7. $f(x) = 3\left(\frac{3}{8}\right)^x$



8. $f(x) = 4\left(\frac{1}{2}\right)^{x+1}$

9. $f(x) = (0.25)^x + 3$

10. $f(x) = \left(\frac{2}{3}\right)^x - 1$

