These are alleged answers. For each error herein, you get extra-credit points for being the first to report it by e-mail.

1. \( y = 3^x \)

2. \( y = 5 \left( \frac{9}{5} \right)^{x/2} \)

3. \( f(x) = 5 \left( \frac{9}{5} \right)^{(x-3)/7} \)

4. \( f(x) = 9 \cdot \left( \frac{7}{9} \right)^{(t-2)/3} \)

5. The run is 8, so \( f(x) = \frac{4}{9} \cdot a^x \), where
   \[
   \frac{4}{9} \cdot a^8 = \frac{1}{4} \quad \text{or} \quad a^8 = \frac{9}{16}
   \]

   Thus \( a = \left( \frac{9}{16} \right)^{1/8} \).

   Thus \( f(x) = \frac{4}{9} \cdot \left( \frac{9}{16} \right)^{(x+2)/8} \).

   Thus \( f(2) = \frac{1}{3} \).

6. \( N(t) = 50,000 \cdot \left( \frac{17}{5} \right)^{t/4} \)