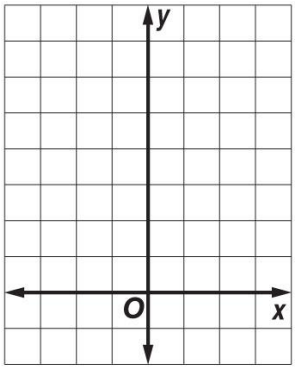
NAME _____ DATE _____ PERIOD _____

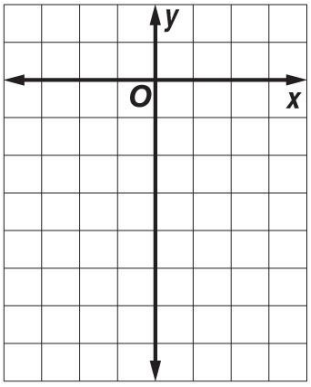
7-1

Graph each function. State the domain and range.

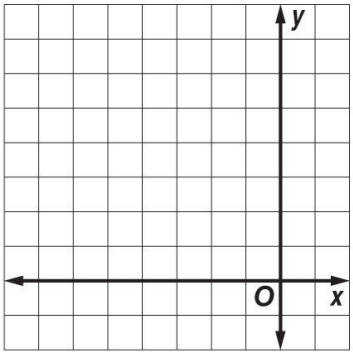
1. $y = 3(2)^x$



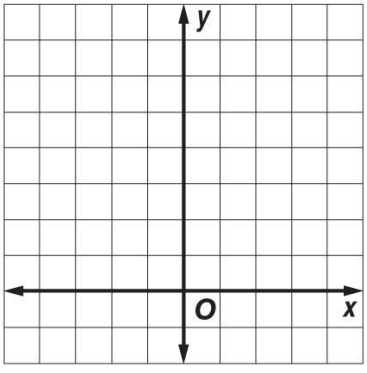
2. $y = -2(3)^x$



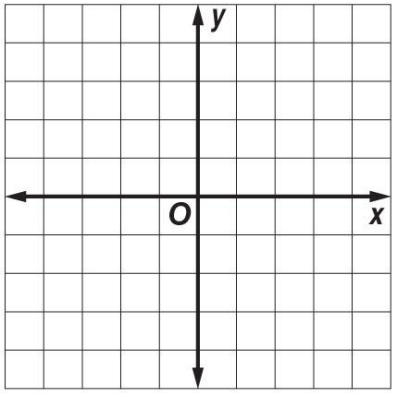
3. $y = 2^{x+5}$



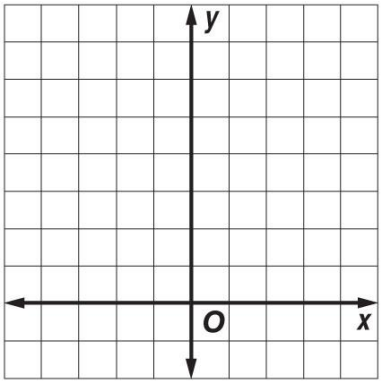
4. $y = 6\left(\frac{1}{2}\right)^x$



5. $y = 4^x - 2$



6. $y = 4\left(\frac{1}{5}\right)^{x+3} - 1$



NAME _____ DATE _____ PERIOD _____

7-2

Solving Exponential Equations and Inequalities

Solve.

1. $9^{8x-4} = 81^{3x+6}$

2. $4^{x-5} = 16^{2x-31}$

3. $4^{3x-3} = 8^{4x-4}$

4. $9^{-x+5} = 27^{6x-10}$

5. $\left(\frac{1}{36}\right)^{6x-3} > 6^{3x-9}$

6. $\left(\frac{1}{9}\right)^{2x+7} \leq 27^{6x-12}$

Write an exponential function whose graph passes through the given points.

7. (0, –1) and (6, –64)

8. (0, 7) and (–2, 28)