Warm Up 3.1

Name _____ Period _____

Find the missing values in the geometric sequences below.

1.

x	1	2	3	4
y	7			875

2.

x	1	2	3	4	5
y	6				96

3. Explain the process you use to find the common ratio for the sequences above.

4. Explain the similarities and differences between a geometric sequence and an exponential equation?

Simplify each of the following.

5. $\dfrac{5^7}{5^4}$

6. $7^3 \cdot 7^5$

7. $\left(3^4\right)^5 \cdot 3^2$

8. $\dfrac{x^5}{x^2} \cdot x^7$

9. $\dfrac{y^2}{y^6}$

10. $b^7 \cdot b^{-9}$

Simplify each of the following.

5. $\dfrac{5^7}{5^4}$

6. $7^3 \cdot 7^5$

7. $\left(3^4\right)^5 \cdot 3^2$

8. $\dfrac{x^5}{x^2} \cdot x^7$

9. $\dfrac{y^2}{y^6}$

10. $b^7 \cdot b^{-9}$