

Math Sheet

Name _____ Score _____ / 12 Teacher _____ Date _____

Multiply and Divide Powers

Apply the product and quotient laws.

1. $5^6 \cdot 5^{-5}$

2.
$$\frac{\left(\frac{3}{8}\right)^{-2}}{\left(\frac{3}{8}\right)^6}$$

3. $y \cdot y^{-5}$

Domain: real variables $y \in \mathbb{R}$ $y \neq 0$

4.
$$\frac{6^{-6}}{6^2}$$

5.
$$\left(\frac{2}{3}\right)^3 \cdot \left(\frac{2}{3}\right)^{-4}$$

6.
$$\frac{x^{-2}}{x^5}$$

Domain: real variables $x \in \mathbb{R}$ $x \neq 0$

7. $5^5 \cdot 5^{-6}$

8.
$$\frac{\left(\frac{1}{5}\right)^{-4}}{\frac{1}{5}}$$

9. $y^6 \cdot y^{-3}$

Domain: real variables $y \in \mathbb{R}$ $y \neq 0$

10.
$$\frac{4^{-3}}{4}$$

Math Sheet

Name _____ Score _____ / 12 Teacher _____ Date _____

Multiply and Divide Powers

Apply the product and quotient laws.

11. $\frac{1}{2} \cdot \left(\frac{1}{2} \right)^{-4}$

12. $\frac{x^{-6}}{x}$

Domain: real variables $x \in \mathbb{R} \quad x \neq 0$
