

Name: **Key**



UNIT 6 - DAY 6

HOMEWORK

1. $(4xy)^0$ **1**

2. $\frac{9^{-1}}{x}$ **$\frac{1}{9x}$**

3. $\frac{x}{11^{-2}}$ **$\frac{11^2}{x}$**

4. $6^2 \cdot 6^{-3}$ **$\frac{6^2}{6^3} = \frac{1}{6^1}$**

5. $(2^{-2})^{-3}$ **2^6**

6. $(5^{-1})^2$ **$5^{-2} = \frac{1}{5^2}$**

7. x^{-5} **$\frac{1}{x^5}$**

8. $\frac{3x^{-10}}{x}$ **$\frac{3}{x^{10} \cdot x} = \frac{3}{x^{11}}$**

9. $\frac{4^{-6} x^{-10}}{x^{-3}}$ **$\frac{x^3}{x^{10} \cdot 4^6} = \frac{1}{x^7 4^6} \frac{1}{4^6 x^7}$**

10. $\frac{6x^{-10} y^{-3}}{7xy^{-1}}$ **$\frac{6 y^1}{7 x^{10} x y^3} = \frac{6}{7 x^{11} y^2}$**

11. $10x^{-12} y^{-4}$ **$\frac{10}{x^{12} y^4}$**

12. $\frac{(5x)^{-4}}{2}$ **$\frac{5^{-4} x^{-4}}{2} = \frac{1}{5^4 \cdot 2 \cdot x^4}$**

13. $\frac{x^{-10}}{1} \cdot \frac{1}{x^2}$ **$\frac{1}{x^{10}} \cdot \frac{1}{x^2} = \frac{1}{x^{12}}$**

14. $\frac{x^{-1}}{1} \cdot \frac{y}{x^{10}}$ **$\frac{1}{x^1} \cdot \frac{y}{x^{10}} = \frac{y}{x^{11}}$**