

## Chapter 8 Test REVIEW

Name: \_\_\_\_\_

Tally

9. Simplify

$$(4m^5)^{-6} \cdot (mn)^8$$

$$\begin{aligned} & 4^{-6} m^{-30} m^8 n^8 \\ & 4^{-6} m^{22} n^8 \end{aligned}$$

$$\begin{aligned} & n^8 \\ & 4096 m^{22} \end{aligned}$$

Solution

11. Simplify

$$\frac{10^7}{10^3} = 10^4$$

$$10000$$

Solution

12. Simplify

$$\frac{a^{10}b}{a^6b^2}$$

$$a^4 b^{-1}$$

$$a^4 / b$$

Solution

14. Simplify

$$\frac{b^9}{b^3}$$

$$b^6$$

$$b^6$$

Solution

15. Simplify

$$\left(\frac{4}{5}\right)^{-3} = \frac{4^{-3}}{5^{-3}} = \frac{5^3}{4^3} = \frac{125}{64}$$

$$\frac{125}{64}$$

Solution

$$10^{25} / 5^1$$

## Chapter 8 Test REVIEW

Tally Name:

1. Simplify $4s^{-8}t$	<i>Applying Simplifying</i> $\frac{4t}{s^8}$	Solution _____
2. Simplify $(-10)^0$	<i>Applying Simplifying</i>	Solution _____
3. Evaluate the expression for $n = -2$ and $w = 4$ $\frac{n^{-1}}{w^2}$	$\frac{1}{(-2)(4)^2} = \frac{1}{32}$	Solution _____
5. Simplify $5x^9 \cdot 6x^{-8}$	<i>Applying Simplifying</i> $30x^1$	Solution _____
6. Simplify $4x^{-10} \cdot 6x^6$	<i>Applying Simplifying</i> $24x^{-4}$	Solution _____
7. Simplify $(a^4)^{10}$	<i>Applying Simplifying</i> $a^{40}$	Solution _____
8. Simplify $(3g^2)^{-5}$	<i>Applying Simplifying</i> $\frac{1}{243g^{10}}$	Solution _____