Chapter 8 Test REVIEW

Name:

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

Chapter 8 Test REVIEW Name:

9. Simplify $(4m^5)^{-6} \bullet (mn)^8$	Solution $n^8 / 4096m^{22}$
11. Simplify $\frac{10^7}{10^3}$	Solution $10^4 = 10,000$
12. Simplify $\frac{a^{10}b}{a^6b^2}$	Solution $1/a^4b$
14. Simplify $\frac{b^9}{b^3}$	Solution b^6
15. Simplify $\left(\frac{4}{5}\right)^{-3}$	Solution $125/64$

Chapter 8 Test REVIEW Name:

Explain the mistake(s) Taylor made when she tried to simplify this problem. Show Taylor how she should have simplified the problem.

$$\left(\frac{4x}{y^{-2}}\right)^{-2} = \frac{4^2x^2}{y^{-4}}$$

$$8x^2y^4$$

Explanation:

- multiplied 4·2 not 4^2
- forgot the negative
- left a negative exponent

Correct work and solution.

$$\left(\frac{4x}{y^{-2}}\right)^{-2} = \frac{4^{-2}x^{-2}}{y^4} =$$

$$\frac{1}{16x^2y^4}$$