

Name: _____

HW # 14

All variables represent nonzero numbers.

Rewrite each expression using positive exponents (*do not evaluate*).

1. 15^{-9} $\boxed{\frac{1}{15^9}}$

2. $(-6)^{-7}$ $\boxed{\frac{1}{(-6)^7}}$

3. b^{-25} $\boxed{\frac{1}{b^{25}}}$

Evaluate.

4. 4^3
 $\boxed{64}$

5. 4^{-3}
 $\frac{1}{4^3}$ $\boxed{\frac{1}{64}}$

6. 9^{-2}
 $\frac{1}{9^2}$ $\boxed{\frac{1}{81}}$

7. $7x^0$
 $7 \cdot x^0$
 $7 \cdot 1$
 $\boxed{7}$

8. $(-2)^{-1}$
 $\frac{1}{(-2)^1}$ $\boxed{\frac{1}{-2}}$

9. $(-2)^5$
 $(-2)(-2)(-2)(-2)(-2)$
 $\boxed{-32}$

10. $5x^{-4}$
 $5 \cdot x^{-4}$
 $\frac{5}{1} \cdot \frac{1}{x^4}$
 $\boxed{\frac{5}{x^4}}$

11. a^3b^{-4}
 $a^3 \cdot b^{-4}$
 $\frac{a^3}{1} \cdot \frac{1}{b^4}$
 $\boxed{\frac{a^3}{b^4}}$