

Name ANSWER KEY \_\_\_\_\_ points

**Simplify, expressing your answer without negative exponents:**

$$\begin{aligned}\left(\frac{c^{-4}}{16d^8}\right)^3 &= \frac{(c^{-4})^3}{(16d^8)^3} = \frac{c^{(-4)3}}{16^3 d^{8 \cdot 3}} = \frac{c^{-12}}{16^3 d^{24}} = \boxed{\frac{1}{16^3 c^{12} d^{24}}} \\ &= \frac{1}{4096 c^{12} d^{24}}\end{aligned}$$