

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

Score: \_\_\_\_\_

**Exponent Rules**

Use product rule to rewrite each expression as single positive exponent.

1) $4^8 \times 4^3$	2) $12^{-6} \times 12^{-10}$	3) $17^{-7} \times 17^6$
4) $3^{-5} \times 3^{-3}$	5) $7^{-2} \times 7^4$	6) $20^6 \times 20^8$

Use quotient rule to rewrite each expression as single positive exponent.

1) $14^5 \div 14^{-9}$	2) $5^{-7} \div 5^2$	3) $6^4 \div 6^{-6}$
4) $11^{-2} \div 11^{-4}$	5) $13^4 \div 13^5$	6) $8^3 \div 8^{-6}$

Use power rule to rewrite each expression as single positive exponent.

1) $(2^{10})^7$	2) $(19^8)^{-4}$	3) $(9^{-2})^2$
4) $(8^9)^{-3}$	5) $(17^{-7})^{-5}$	6) $(13^3)^4$