Exponents Rules

Name:_____ Date:_____

Rewrite each expression using product rule.

1) $16^5 \times 16^7 =$ _____

2) $3^8 \times 3^7 =$ _____

3) $9^4 \times 9^{10} =$ _____

4) $10^5 \times 10^5 =$ _____

5) $8^6 \times 8^9 =$ _____

6) $5^2 \times 5^3 =$ _____

Rewrite each expression using quotient rule.

1) $5^6 \div 5^7 =$ _____

2) $8^5 \div 8^4 =$ _____

3) $9^8 \div 9^2 =$ _____

4) $13^9 \div 13^6 =$ _____

5) $14^5 \div 14^3 =$ _____

6) $3^5 \div 3^2 =$ _____

Rewrite each expression using power rule.

1) $(10^5)^3 =$ _____

2) $(9^4)^3 =$ _____

3) $(4^7)^2 =$ _____

4) $(19^9)^1 =$ _____

5) $(6^{10})^1 =$ _____

6) $(2^8)^2 =$ _____

Exponents Rules

Name:_____ Date:_____

Rewrite each expression using product rule.

1) $16^5 \times 16^7 =$ 16^{12}

2) $3^8 \times 3^7 =$ 3^{15}

3) $9^4 \times 9^{10} =$ 9^{14}

4) $10^5 \times 10^5 =$ 10^{10}

5) $8^6 \times 8^9 =$ 8^{15}

6) $5^2 \times 5^3 =$ 5^5

Rewrite each expression using quotient rule.

1) $5^6 \div 5^7 =$ $\frac{1}{5^1}$

2) $8^5 \div 8^4 =$ 8^1

3) $9^8 \div 9^2 =$ 9^6

4) $13^9 \div 13^6 =$ 13^3

5) $14^5 \div 14^3 =$ 14^2

6) $3^5 \div 3^2 =$ 3^3

Rewrite each expression using power rule.

1) $(10^5)^3 =$ 10^{15}

2) $(9^4)^3 =$ 9^{12}

3) $(4^7)^2 =$ 4^{14}

4) $(19^9)^1 =$ 19^9

5) $(6^{10})^1 =$ 6^{10}

6) $(2^8)^2 =$ 2^{16}