Indices and Laws of Indices
First Law

When expressions with the same base are multiplied, the indices are added.

$a^m \times a^n = a^{m+n}$ $\qquad\qquad$ $2^3 \times 2^3 = 2^6$

Apply first law of indices to each of the following:

$3^3 \times 3^3 =$ $\qquad$ $5^2 \times 5^5 =$ $\qquad$ $2^3 \times 2^3 =$ $\qquad$ $7^2 \times 7^2 =$

$4 \times 4^7 =$ $\qquad$ $3^2 \times 3^6 =$ $\qquad$ $6^3 \times 6^2 =$ $\qquad$ $2^3 \times 2^5 =$

$7^3 \times 7^7 =$ $\qquad$ $8^2 \times 8^4 =$ $\qquad$ $2^5 \times 2^9 =$ $\qquad$ $6^7 \times 6^2 =$

$6^3 \times 6^2 =$ $\qquad$ $3^2 \times 3^6 =$ $\qquad$ $4 \times 4^7 =$ $\qquad$ $2^3 \times 2^5 =$

$3^3 \times 3^3 =$ $\qquad$ $5^2 \times 5^5 =$ $\qquad$ $2^3 \times 2^3 =$ $\qquad$ $7^2 \times 7^2 =$

$7^7 \times 7^7 =$ $\qquad$ $3^9 \times 3^3 =$ $\qquad$ $6^7 \times 6^3 =$ $\qquad$ $2^3 \times 2^5 =$

$1^3 \times 1^7 =$ $\qquad$ $8^2 \times 8^4 =$ $\qquad$ $7^5 \times 7^9 =$ $\qquad$ $4^3 \times 4^9 =$

$6^3 \times 6^2 =$ $\qquad$ $9^2 \times 9^6 =$ $\qquad$ $4 \times 4^7 =$ $\qquad$ $2^3 \times 2^5 =$

$5^5 \times 5^5 =$ $\qquad$ $5^2 \times 5^5 =$ $\qquad$ $2^3 \times 2^3 =$ $\qquad$ $5^2 \times 5^{14} =$

$9^2 \times 9^2 =$ $\qquad$ $8^2 \times 8^{10} =$ $\qquad$ $9^8 \times 9^9 =$ $\qquad$ $4^3 \times 4^{12} =$