

What would happen if there were more terms with the same base? Write an equivalent expression for each problem.

Exercise 9

$$9^4 \times 9^6 \times 9^{13} =$$

Exercise 10

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

Can the following expressions be simplified? If so, write an equivalent expression. If not, explain why not.

Exercise 11

$$6^5 \times 4^9 \times 4^3 \times 6^{14} =$$

Exercise 14

$$2^4 \times 8^2 = 2^4 \times 2^6 =$$

Exercise 12

$$-4^2 \cdot 17^5 \cdot -4^3 \cdot 17^7 =$$

Exercise 15

$$3^7 \times 9 = 3^7 \times 3^2 =$$

Exercise 13

$$15^2 \cdot 7^2 \cdot 15 \cdot 7^4 =$$

Exercise 16

$$5^4 \times 2^{11} =$$

Exercise 17

Let x be a number. Simplify the expression of the following number:

$$2x^3 \cdot 17x^7 =$$

Exercise 18

Let a and b be numbers. Use the distributive law to simplify the expression of the following number:

$$a(a + b) =$$