Practice

For use after Lesson 9.2

Simplify the expression. Write your answer as a power.

1.
$$(-6)^5 \bullet (-6)^4$$
 2. $x^1 \bullet x^9$

2.
$$x^1 \bullet x^9$$

3.
$$\left(\frac{4}{5}\right)^3 \bullet \left(\frac{4}{5}\right)^{12}$$

4.
$$(-1.5)^{11} \bullet (-1.5)^{11}$$
 5. $(y^{10})^{20}$

5.
$$(y^{10})^{20}$$

6.
$$\left(\left(-\frac{2}{9} \right)^8 \right)^7$$

Simplify the expression.

7.
$$(2a)^6$$

8.
$$(-4b)^4$$

9.
$$\left(-\frac{9}{10}p\right)^2$$

10.
$$(xy)^{15}$$

11.
$$10^5 \bullet 10^3 - (10^1)^8$$
 12. $7^2(7^4 \bullet 7^4)$

12.
$$7^2(7^4 \bullet 7^4)$$

13. The surface area of the sun is about $4 \times 3.141 \times (7 \times 10^5)^2$ square kilometers. Simplify the expression.