Practice

For use after Lesson 10.2

Simplify the expression. Write your answer as a power.

1.
$$(-6)^5 \cdot (-6)^4$$

$$\left(-6\right)^{9}$$

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

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

4.
$$(-1.5)^{11} \bullet (-1.5)^{11}$$

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

6.
$$\left(\left(-\frac{2}{9}\right)^{8}\right)^{7}$$
 5.6

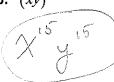
Simplify the expression.

7.
$$(2a)^6 = 2^6 \cdot e^6$$

8.
$$(-4b)^4 = (-4)^4 \cdot b^4$$

8.
$$(-4b)^4 = (-4)^4 \cdot b^4$$
 9. $\left(-\frac{9}{10}p\right)^2 = \left(-\frac{9}{10}\right)^2 \cdot p^4$

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



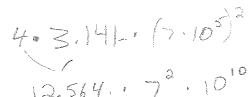
11.
$$10^5 \cdot 10^3 - (10^1)^8$$

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

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

$$7^{10} = 289475249$$

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



6,156,360,000,000