

Name _____

8-2A Lesson Master

Questions on SPUR Objectives
See pages 521–523 for objectives.

SKILLS Objective A

In 1–4, an expression is given.

- a. Write the expression in expanded form.
- b. Write the expression as a single power.

1. $10 \cdot 10^4$

a. _____

b. _____

2. $n^3 \cdot n^5$

a. _____

b. _____

3. $((-7)^2)^3$

a. _____

b. _____

4. $(m^4)^3$

a. _____

b. _____

In 5–12, simplify.

5. $n^2 \cdot n^6$ _____

6. $y^8 \cdot y$ _____

7. $(x^6)^2$ _____

8. $-2p^3 \cdot 8p^4$ _____

9. $(k^0)^2$ _____

10. $a^2 \cdot x^3 \cdot a^7 \cdot x^{12}$ _____

11. $\frac{5}{6}(q^4)^3$ _____

12. $w^2(x \cdot w^6)$ _____

PROPERTIES Objective G

- 13. Write a multiplication problem that uses the Product of Powers Property to get an answer of a^{14} . _____
- 14. Write a power problem that uses the Power of a Power Property to get an answer of b^{10} . _____
- 15. Using the Power of Powers Property, Roberta wrote a^{20} as $(a^5)^x$. Find the value of x Roberta used. _____
- 16. Using the Product of a Power Property, Kenji wrote n^{13} as $n^5 \cdot n^x$. Find the value of x Kenji used. _____

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