

Name: _____

Date: _____

Exponents and Their Properties – Multiplying and Dividing Monomials Additional Practice Problems

Skill

Find the product.

1. $x^5 \cdot x^3 =$

2. $y^2 \cdot y =$

3. $y^4 \cdot y^2 \cdot y^6 =$

4. $a \cdot a \cdot a \cdot a =$

5. $a^6 \cdot a^4 =$

6. $t^3 \cdot t^7 =$

7. $r^5 \cdot r^3 =$

8. $x^4 \cdot x^5 =$

9. $y^3 \cdot y^8 =$

10. $t \cdot t =$

11. $w \cdot w^2 \cdot w \cdot w^2 =$

12. $p^5 \cdot p^3 \cdot p =$

13. $x^6 \cdot x^3 \cdot x =$

14. $h^8 \cdot h^3 =$

15. $x^4 \cdot x^2 =$

16. $y^2 \cdot y =$

17. $x \cdot x \cdot x =$

18. $m^{23} \cdot m^{17} =$

19. $b^{15} \cdot b^5 =$

Find each quotient.

20. $\frac{4^3}{4} =$

21. $\frac{x^3}{x} =$

22. $\frac{x^5}{x^2} =$

23. $\frac{y^4}{y^2} =$

24. $\frac{t^2}{t^2} =$

25. $\frac{z^5}{z^3} =$

26. $\frac{z^9}{z^5} =$

27. $\frac{t^9}{t^3} =$

28. $\frac{5^3}{5} =$

29. $\frac{p^3}{p^2} =$

30. $\frac{6^3}{6^3} =$

31. $\frac{x^{12}}{x^{10}} =$

Reasoning

Simplify.

32. $\frac{4x^3}{4x} =$

33. $\frac{t^3 \cdot t^2}{t} =$

34. $\frac{a \cdot b^3}{b^2} =$

35. $\frac{(ab)^2}{ab^2} =$

36. $\frac{x^4 y^2}{x^3 y^5} =$

37. $\frac{4x^4 y^2}{2xy^3} =$

38. $x^a \cdot x^a =$

39. $\frac{x^a}{x^b} =$

40. $\frac{x^4 y^7 z}{x^2 y z^3} =$

41. $\frac{x^4 y^2}{x^4 y^2} =$

42. $\frac{xy^5}{x^2 y^2} =$

43. $\frac{x^2 y}{x^3 y^2} =$