Review 8.1-8.2 Worksheet

Name: _____

Simplify the expression. In problems involving numerical bases only, write your answer using exponents.

1. $5^3 \cdot 5^4$

2. $6 \cdot 6^7$

3. $(-2)^3 \cdot (-2)^6$

4. $(2^8)^2$

5. $[(-4)^3]^2$

6. $(8 \cdot 4)^5$

7. $m^5 \cdot m^2$

8. $n^2 \cdot n^4 \cdot n^5$

9. $(y^3)^5$

10. $(-2x)^3$

11. $(3d^2)^3 \cdot 2d^2$

12. $(-4s^2)^3(2s^3)^6$

13. $\frac{8^7}{8^2}$

14. $\frac{4^6 \cdot 4^2}{4^3}$

15. $\left(-\frac{2}{3}\right)^3$

16. $10^2 \cdot \frac{1}{10^7}$

17. $7^9 \cdot \left(\frac{1}{7}\right)^4$

18. $\frac{1}{t^9} \cdot t^{13}$

19. $\frac{p^7}{q^7}$

20. $\left(\frac{6x^9}{3y^4}\right)^2$

Evaluate the expression. Leave answers as fractions.

25. 3^{-4}

26. $(-5)^{-3}$

27. 7^{0}

28. $4^{-5} \cdot 4^{3}$

29. $\left(\frac{1}{2}\right)^{-3}$

30. $(3^{-2})^{3}$

31. $\frac{1}{2^{-5}}$

32. $\frac{8^{-4}}{8^{-6}}$

Simplify the expression. Write your answers using only positive exponents.

33. y^{-10}

34. $(3c^{-2})^{3}$

35. $10b^{-3}c^{5}$

36. $(2d^{5}e^{-2})^{-3}$

37. $\frac{x^{-4}}{y^{-5}}$

38. $\frac{1}{6t^{-5}u^{3}}$

39. $\frac{3}{(-2z)^{-5}}$

40. $\frac{(2e)^{-4}g^{5}}{e^{5}g^{-3}}$