Mathematical Operations: Practice

Simplify each of the following, then check your answers on the back.

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| 1. $-4(-13x+1)$ | 2. $-3x^{2}+x^{8}-7x^{2}+4$ | 3. $-10-(-2)$ | $$4. \frac{-11g^{2}}{22g^{3}}$$ |
| 5. $-1-18$ | 6. $\left(7x^{3}\right)(-5)$ | $$7. \frac{6x-4}{-2}$$ | 8. $-27+2$ |
| 9. $(-7d^{5}f^{2})(-6g)$ | $$10. \frac{22}{11}$$ | 11. $(3x+5)(2x-4)$ | 12. $(12)(5)$ |
| 13. $(-3)(15)$ | 14. $28+3$ | 15. $(10)(-4)$ | 16. $(-4x+6)(-5x-3)$ |
| $$17. \frac{26}{-13}$$ | 18. $(x^{3}y^{2}z)(w^{4}x^{7}y)$ | 19. $8-(20)$ | $$20. \frac{21a^{3}b}{14}$$ |
| 21. $30-21$ | 22. $a^{4}-2a+a^{3}+4a-6$ | 23. $(x^{4})(3)$ | 24. $8g^{3}+7g^{3}$ |
| $$25. \frac{-9}{-18}$$ | $$26. \frac{2x^{5}}{x^{3}}$$ | $$27. \frac{h^{2}}{h^{8}}$$ | $$28. \frac{-27}{18}$$ |
| $$29. \frac{7x-28}{21}$$ | $$30. \frac{7k^{9}m}{35m}$$ | 31. $-12+(-14)$ | 32. $9-5r^{2}+6r^{3}-4r^{2}$ |
| 33. $(-9)(-3)$ | 34. $(-7abc^{8})(-4a^{3}b^{9}c)$ | $$35. \frac{p^{7}}{p^{2}}$$ | $$36. \frac{-27}{3}$$ |

Answers:

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| 1. $52x-4$ | 2. $x^{8}-10x^{2}+4$ | 3. $-8$ | $$4. -\frac{1}{2}\left(g^{-1}\right)= $$ |
| 5. $-19$ | 6. $-35x^{3}$ | $$7. -3x+2$$ | 8. $-25$ |
| 9. $42d^{5}f^{2}g$ | $$10. \frac{2}{1}=$$ | 11. $6x^{2}-2x-20$ | 12. $60$ |
| 13. $-45$ | 14. $31$ | 15. $-40$ | 16. $20x^{2}-18x-18$ |
| $$17. \frac{2}{-1}=$$ | 18. $w^{4}x^{10}y^{3}z$ | 19. $-12$ | $$20. \frac{3a^{3}b}{2}$$ |
| 21. $9$ | 22. $a^{4}+a^{3}+2a-6$ | 23. $3x^{4}$ | 24. $15g^{3}$ |
| $$25. \frac{1}{2}$$ | $$26. \frac{2}{1}\left(x^{2}\right)=\frac{2x^{2}}{1}=$$ | $$27. \frac{1}{1}\left(h^{-6}\right)=\frac{1}{1h^{6}}=$$ | $$28. -\frac{3}{2}$$ |
| $$29. \frac{x-4}{3}$$ | $$30. \frac{k^{9}}{5}\left(m^{0}\right)=$$ | 31. $26$ | 32. $6r^{3}-9r^{2}+9$ |
| 33. $27$ | 34. $28a^{4}b^{10}c^{9}$ | $$35. \frac{1}{1}\left(p^{5}\right)=\frac{p^{5}}{1}=$$ | $$36. -\frac{9}{1}=$$ |