
1-22: Simplify each operation. Assume that no variable equals 0.

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

2. $c^5 \cdot c^2 \cdot c^2$

3. $a^{-4} \cdot a^{-3}$

4. $x^5 \cdot x^{-4} \cdot x$

5. $(2x)^2(4y)^2$

6. $-2gh(g^3h^5)$

7. $10x^2y^3(10xy^8)$

8. $\frac{24wz^7}{3w^3z^5}$

9. $\frac{-6a^4bc^8}{36a^7b^2c}$

10. $\frac{-10pt^4r}{-5p^3t^2r}$

11. $(g + 5) + (2g + 7)$

12. $(5d + 5) - (d + 1)$

13. $(x^2 - 3x - 3) + (2x^2 + 7x - 2)$

14. $(-2f^2 - 3f - 5) + (-2f^2 - 3f + 8)$

15. $-5(2c^2 - d^2)$

16. $x^2(2x + 9)$

17. $(a - 5)^2$

18. $(2x - 3)(3x - 5)$

19. $(r - 2t)(r + 2t)$

20. $(3y + 4)(2y - 3)$

21. $(3 - 2b)(3 + 2b)$

22. $(3w + 1)^2$