

Power Rule and Constant Rule Answer Key

1. $f'(x) = 2x$

3. $f'(x) = 2x^3$

5. $f'(x) = 2.4x^3 - 0.8x$

7. $f'(x) = 4\pi r^2 + 4$

9. $f'(x) = 0.9x^2 - 8x$

11. $f'(x) = -20x^4 + 21x^2 + 1$

13. $f'(-2) = -8$

15. $f'(1) = -1$

17. $f'\left(\frac{1}{2}\right) = \frac{7}{6}$

19. $y = 6x - 12$

21. $y = -2x + \frac{9}{4}$

23. $y = \frac{32}{3}x + 16$

25. $f'(x) = 4x^3 + 3x^2 - 4x + 1; f''(x) = 12x^2 + 6x - 4$