The power rule

Name _____ Date _____

1. $f(x) = \frac{-9}{x^3}$ $f'(x) =$ _____

2. $f(x) = \frac{-4}{x^4}$ $f'(x) =$ _____

3. $f(x) = -5x^4 - 3x^3 - 8x^2 + 4x$ $f'(x) =$ _____

4. $f(x) = \sqrt{x}$ $f'(x) =$ _____

5. $f(x) = -2x^4 + 4x^3 - 4x^2 + 9x - 6$ $f'(x) =$ _____

6. $f(x) = 3\sqrt{x}$ $f'(x) =$ _____

The power rule

7. $f(x) = \frac{-8}{x}$ $f'(x) =$ _____

8. $f(x) = \frac{8}{x}$ $f'(x) =$ _____

9. $f(x) = -5x^4 - 9x^3 - 3x^2 - 9x - 8$ $f'(x) =$ _____

10. $f(x) = 8\sqrt{x}$ $f'(x) =$ _____

11. $f(x) = \frac{-7}{x}$ $f'(x) =$ _____

12. $f(x) = 8\sqrt{x}$ $f'(x) =$ _____