

(C1-7.2) Name:

Homework Questions 2 – Finding the Derived Function

Differentiate the following, leave your answer in index form

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

2. $f(x) = x^{-2}$

3. $f(x) = x^{-6}$

4. $f(x) = x^{\frac{1}{4}}$

5. $f(x) = \sqrt[4]{x}$

6. $f(x) = \sqrt[6]{x}$

7. $f(x) = \frac{1}{x^4}$

8. $f(x) = \frac{1}{x^5}$

9. $f(x) = \frac{1}{\sqrt[4]{x}}$

10. $f(x) = \frac{1}{\sqrt[6]{x}}$

11. $f(x) = \frac{x^5}{x^2}$

12. $f(x) = \frac{x^7}{x^3}$

13. $f(x) = \frac{x^2}{x^5}$

14. $f(x) = \frac{x}{x^3}$

15. $f(x) = x^2 \times x^5$

16. $f(x) = x^4 \times x^5$

17. $f(x) = 5x^4$

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

19. $f(x) = \frac{3}{x^2}$

20. $f(x) = \frac{5}{\sqrt[3]{x^2}}$