MA104 - Differential Calculus
Derivatives

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1. $f(t) = (2t - 7)^3$

2. $f(x) = \frac{5x}{(1-x)^2}$

3. $f(x) = x^2\sqrt{9 - x^2}$

4. $g(t) = 3t - 5\cos^2 \pi t$

5. $h(x) = \sqrt{x} + \frac{1}{4}\sin(2x)^2$

6. $f(x) = \ln(e^{5x})$

7. $y = x^2 \tan \frac{1}{x}$

8. $h(x) = e^{10-x^2}$

9. $y = \sin^5 x$

10. $f(t) = \cot(4t^2 + 9)$

11. $y = \ln(t^2 - 9)$

12. $f(x) = \cos^3(e^{4x})$

13. $r(\theta) = \tan(\theta + \cos\theta)$

14. $f(x) = \sqrt{\sin x \cos x}$

15. $y = \sin(\cos(\sin x))$

16. $f(x) = \sqrt{4 - 3\cos x}$

17. $g(t) = \sec(\sqrt{t^2 - 9})$

18. $f(x) = \cot^7(x^5)$

19. $f(x) = \tan(e^{5-6x})$