

MA104 - Differential Calculus Derivatives

$$1. \ f(x) = e^x(x^3 - 1)$$

$$2. \ f(x) = \frac{3x^2 - 5}{7}$$

$$3. \ f(x) = \sqrt{x}(1 - x^4)$$

$$4. \ f(z) = \frac{z^2}{\sqrt{z+z}}$$

$$5. \ f(x) = \ln x(x^2 + 1)(x + 4)$$

$$6. \ f(x) = x \cos x$$

$$7. \ f(x) = e^x \sin x$$

$$8. \ p(q) = \sqrt{q} + 4 \sec q$$

$$9. \ f(x) = x \sin x + \cos x$$

$$10. \ h(t) = \tan t \ \cot t$$

$$11. \ f(x) = -x + \tan x$$

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

$$13. \ f(z) = \sin z \cos z$$

$$14. \ r(\theta) = \theta \tan \theta$$

$$15. \ f(x) = \frac{\sin x}{1-\cos x}$$