

1 | Review Sheet

1.1 | Problem 1

1.1.1 | (b)

$$g(x) = x^{32} - 7x^{12} + x^{-8} - e^x + 12\sqrt[7]{x+1} + (\cos x)^6$$
$$g'(x) = 32x^{31} - 84x^{11} - 8x^{-9} - e^x + \frac{12}{\sqrt[7]{x+1}^6} + 6 \sin(x)(\cos x)^5$$

1.1.2 | (d)

$$f(x) = 3x(x^2 + 1)^3$$