

**Activity 2.1.3 - Answer key quick ref**

$$(a) f'(x) = \frac{5}{3}x^{2/3} - 4x^3 + 2^x \ln(2)$$

$$(b) g'(x) = 14e^x + 3 \cdot 5x^4 - 1$$

$$(c) h'(z) = \frac{1}{2}z^{-1/2} - 4z^{-5} + 5^z \ln(5)$$

$$(d) \frac{dr}{dt} = \sqrt{53} \cdot 7t^6 - \pi e^t$$

$$(e) \frac{ds}{dy} = 4y^3$$

$$(f) q'(x) = 2x - 2x^{-2}$$

$$(g) p'(a) = 12a^3 - 6a^2 + 14a - 1$$