Example

Find the derivatives of the following functions.

(a) $f(x) = x^5$

(b) $y = t$

(c) $u = -\sqrt{s}$

(d) $g(x) = \dfrac{5}{x^\pi}$

(e) $v = 100x^2$

Example

Find the derivatives of the following functions.

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

(b) $s(t) = s^2 + \dfrac{1}{s^2}$

(c) $R(z) = \dfrac{3}{\sqrt{z}} - z^{100}$