

# 1 Zapping With d 1

*None*

Find the differential of each of the following expressions; zap each of the following with  $d$ . Note that all italicized letters are variables:

(a)

$$f = 3x - 5z^2 + 2xy$$

(b)

$$g = \frac{c^{1/2}b}{a^2}$$

(c)

$$h = \sin^2(\omega t)$$

(d)

$$j = a^x$$

(e)

$$k = 5 \tan \left( \ln \left( \frac{V_1}{V_2} \right) \right)$$