

Mathematics 122

Quiz #15

Name: _____

Compute the following derivatives. In these problems a , b , and c are constants.

(1) $y = 3 \cdot 5^x$ $y' =$ _____

(2) $A = 6e^r$ $\frac{dA}{dr} =$ _____

(3) $w = 3 \ln(z)$ $\frac{dw}{dz} =$ _____

(4) $C(q) = 5a\sqrt{q} + b \cdot 3^q$ $C'(q) =$ _____

(5) $F(t) = 5ae^t + 6c \ln(t)$ $F'(t) =$ _____