

The initial amount  $A = 4$ , the time  $t = 9$ , and the half-life  $h = 3$ . Substitute into the formula and simplify:

$$R = 4\left(\frac{1}{2}\right)^{\frac{9}{3}} = 4\left(\frac{1}{2}\right)^3 = 4\left(\frac{1}{8}\right) = \frac{1}{2}$$