Correct. Because A is 100 times as large as  $A_0$ ,  $A = 100A_0$ . Substitute this expression in for A.

$$R = \log\left(\frac{100A_0}{A_0}\right) = \log 100$$

Now  $10^2 = 100$ , so  $\log 100 = 2$  and R = 2.