35. Solution: C.

Duration is defined as $\frac{\sum_{t=1}^{n} t v^t R_t}{\sum_{t=1}^{n} v^t R_t}$, where v is calculated at 8% in this problem.

(Note: There is a minor but important error on page 228 of the second edition of Broverman's text. The reference "The quantity in brackets in Equation (4.11) is called the duration of the investment or cash flow" is not correct because of the minus sign in the brackets. There is an errata list for the second edition. Check http://www.actexmadriver.com/client/client_images/pdfs/Math_Inv_Credit_2ED.pdf if you do not have a copy).

The current price of the bond is $\sum_{t=1}^{n} v^t R_t$, the denominator of the duration expression, and is given as 100. The derivative of price with respect to the yield to maturity is $-\sum_{t=1}^{n} t v^{t+1} R_t$ = - v times the numerator of the duration expression. Thus, the numerator of the duration expression is - (1.08) times the derivative. But the derivative is given as -700. So the numerator of the duration expression is 756. Thus, the duration = 756/100 = 7.56.