Correct. You need to find *t* when $7.5 = -16t^2 + 34t + 3.5$, or $16t^2 - 34t + 4 = 0$.

Divide both sides by 2: $8t^2 - 17t + 2 = 0$

Use the Quadratic Formula: $t = \dfrac{-(-17) \pm \sqrt{(-17)^2 - 4 \cdot 8 \cdot 2}}{2 \cdot 8}$

This simplifies to: $t = \dfrac{17 \pm \sqrt{225}}{16} = \dfrac{17 \pm 15}{16} = 2 \quad \text{or} \quad \dfrac{1}{8}$

The ball is 7.5 feet high and going up when $t = \dfrac{1}{8}$. It is coming down when $t = 2$.