Precalculus Prerequisites Section 0.7 Exercises

For problems 1-5, find all real solutions.

1. $2(x - 2)^2 - \dfrac{4}{3} = \dfrac{2}{3}$

2. $4x^3 + x^2 - 8x - 2 = 0$

3. $.1x^2 - .5x + .6 = 0$

4. $2x^4 - 10x^3 = -4x^2$

5. $x^2 - \sqrt{3}x - 3 = 0$

6. An apple, hanging 20 feet in the air, falls from a tree. Its distance from the ground after t seconds is given by $-16t^2 + 20$. If Newton is 4 feet tall and standing directly beneath the apple, after how many seconds will the apple hit Newton?

7. (Extra Credit) Find a quadratic formula song on youtube that you like. Memorize the part of the song involving the quadratic formula. Come to my office and sing it for me.