1. (4 points each) Simplify

   a) $\sqrt{288} - \sqrt{200}$

   b) $\sqrt[3]{\dfrac{81x^{-2}y^6z^{16}}{3x^{-5}y^{-3}}}$

2. True or False?

   a) $x = -1$ is a solution to the equation
   $$\frac{x+3}{x+1} - \frac{2}{x+1} = 0$$

   b) $\sqrt{x^2} = -x$ when $x < 0$.