"Any fool can know. The point is to understand."
-Albert Einstein

1. Find the conjugate of the following expressions.

   (a) $x\sqrt{3} + 2$

   (b) $4\sqrt{7} + 3x$

   (c) $a - b$

   (d) $\sqrt{a} + \sqrt{b}$

   (e) $\sqrt{x^2 + x - 9} + x$

   (f) $a + \sqrt{7}$

2. Rationalize the denominator.

   (a) $\dfrac{3}{\sqrt{5}}$

   (b) $\dfrac{\sqrt{b}}{\sqrt{a}}$

   (c) $\dfrac{\sqrt{3}}{\sqrt[5]{4}}$

   (d) $\dfrac{x + 1}{\sqrt{x^2 + 4} - \sqrt{x}}$

   (e) $\dfrac{1 + \sqrt{3}}{1 - \sqrt{3}}$

   (f) $\dfrac{4}{5 - \sqrt{7}}$

   (g) $\dfrac{1}{\sqrt{3}} + 2\sqrt{12}$

   (h) $\dfrac{-2}{\sqrt[4]{x^2 y^9 13}}$