## เฉลยแบบฝึกหัด 4.2

1. $\sqrt[5]{x+h} \approx \sqrt[5]{x} + \frac{1}{5}x^{-\frac{4}{5}}h$

   $\sqrt[5]{100015} = \sqrt[5]{100000+15} \approx \sqrt[5]{100000} + \frac{1}{5}(100000)^{-\frac{4}{5}}(15) = 10.0003$

   $\sqrt[5]{30} = \sqrt[5]{32+(-2)} \approx \sqrt[5]{32} + \frac{1}{5}(32)^{-\frac{4}{5}}(-2) = 1.975$

2.2 $\sqrt[3]{x+h} \approx \sqrt[3]{x} + \frac{1}{3}x^{-\frac{2}{3}}h$

   $\sqrt[3]{7.9} = \sqrt[3]{8+(-0.1)} \approx \sqrt[3]{8} + \frac{1}{3}(8)^{-\frac{2}{3}}(-0.1) = 2 - 0.008 = 1.992$