Relative error in Heron's Method for $\sqrt{2}$ $x_0 = 0.5$ $x_0=0.75$ 10^{-1} $x_0 = 1.0$ $x_0=1.25$ $x_0 = 1.5$ 10⁻³ $x_0 = 1.75$ $x_0 = 2.0$ $x_0 = 2.25$ 10-5 Relative error $|x_n^2 - a|/a$ 10^{-7} 10^{-9} 10^{-11} 10^{-13} 10^{-15} 2.0 3.0 1.5 2.5 3.5 4.0 4.5 1.0 5.0 Iteration number (n)