

4) Check

$f(p_3) f(p_2)$
If $f(p_3) f(p_2) < 0$, then we take $(p_2, f(p_2))$
and $(p_3, f(p_3))$ for the secant line
If $f(p_3) f(p_2) > 0$, then we take
 $(p_1, f(p_1))$ and $(p_3, f(p_3))$
• interchange $p_2 \leftrightarrow p_1$

The Method of False Position is easiest
to work with if

$f(x) =$ concave up ($f''(x) > 0$)
concave down

If p_1 - false point, then

$$p_n = p_{n-1} - \frac{p_{n-1} - p_1}{f(p_{n-1}) - f(p_1)} f(p_{n-1})$$

