

$$f(x) = x^3 - 5$$

Bisection Search

Step	x_{LOW}	x_{HIGH}	x_{ROOT}	$f(x_{\text{ROOT}})$	Error
1	1	2			
2					
3					

False Position Search

Step	x_{LOW}	x_{HIGH}	x_{ROOT}	$f(x_{\text{ROOT}})$	Error
1	1	2			
2					
3					

$$x_{\text{ROOT}} = (x_{\text{LOW}} + x_{\text{HIGH}}) / 2 \qquad x_{\text{ROOT}} = x_{\text{HIGH}} - \frac{(x_{\text{HIGH}} - x_{\text{LOW}})}{(f(x_{\text{HIGH}}) - f(x_{\text{LOW}}))} f(x_{\text{HIGH}})$$