

## 4.8: Newton's Method.

4.8  
1/1

ex1: Solve:  $X^7 + 4 = 0$ ;  $X_1 = -1$

see notebook

ex2:  $\sqrt[100]{100}$

$$X_{n+1} = X_n - \frac{f(X_n)}{f'(X_n)}$$

ex3: neg root of  $e^x = 4 - x^2$

ex4: all roots of  $\sin x = x^2 - 2$

ex5:  $\cos(x^2 - x) = x^4$