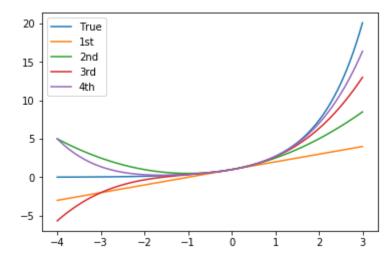


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```
In [29]: import numpy as np
    import matplotlib.pyplot as plt

t1 = lambda x : 1+x
    t2 = lambda x: 1+x + 1.0/2*x**2
    t3 = lambda x : 1+x +1.0/2*x**2+1.0/6*x**3
    t4 = lambda x : 1+x +1.0/2*x**2+1.0/6*x**3+1.0/24*x**4

x = np.linspace(-4, 3, 100)
    plt.plot(x, np.exp(x), label = 'True')
    plt.plot(x, t1(x), label = '1st')
    plt.plot(x, t2(x), label = '2nd')
    plt.plot(x, t3(x), label = '3rd')
    plt.plot(x, t4(x), label = '4th')
    plt.legend()
    plt.savefig('1.pdf', dpi=100, format='pdf')
    plt.show()
```



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```
In [30]: x = np.linspace(-20, 8, 100)
    plt.plot(x, np.exp(x), label = 'True')
    plt.plot(x, t1(x), label = '1st')
    plt.plot(x, t2(x), label = '2nd')
    plt.plot(x, t3(x), label = '3rd')
    plt.plot(x, t4(x), label = '4th')
    plt.legend()
    plt.savefig('2.pdf', dpi=100, format='pdf')
    plt.show()
```

