Due: Friday, November 14th, 4:00pm

(5 points) Find general formulas that can be used to compute the antiderivative of every function of the form:

$$\int \frac{x^n}{1+x^2} dx \text{ for } any \text{ positive integer } n.$$

[Hint: It may be useful to consider the cases where n is even and where n is odd separately.]