## Sketching Graphs Using Calculus: Examples

1. Sketch the graph of $f(x)=\frac{x^{2}}{x^{2}+5}$
2. Sketch the graph of $f(x)=\left(9-x^{2}\right)^{4}$
3. Sketch the graph of $f(x)=\sqrt{x}(x+6)$
4. Sketch the graph of $f(x)=x^{2 / 3}-x^{5 / 3}$
5. Sketch the graph of $f(x)=\frac{x}{x^{2}-1}$
6. Sketch the graph of $f(x)=\frac{\cos x}{1+\sin x}$
7. Sketch the graph of $f(x)=\frac{e^{x}}{x^{3}}$
