|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Function** | Continuous Intervals | Intercepts(x or y-intercepts) | Vertical Asymptotes | Horizontal Asymptotes | Oblique Asymptotes | Extrema(maxima or minima) | Increasing Intervals | Decreasing Intervals | Points of Inflection | Concave Up Intervals | Concave Down Intervals |
| $$f(x)=x^{2}-4x+3$$ |  |  |  |  |  |  |  |  |  |  |  |
| $$g(x)=x^{3}-3x+3$$ |  |  |  |  |  |  |  |  |  |  |  |
| $$h\left(x\right)=\left(x-2\right)^{3}+1$$ |  |  |  |  |  |  |  |  |  |  |  |
| $$f\left(x\right)=x^{2}(x^{2}-2)$$ |  |  |  |  |  |  |  |  |  |  |  |
| $$g\left(x\right)=x+sin⁡(x)$$ |  |  |  |  |  |  |  |  |  |  |  |
| $$h\left(x\right)=x^{\frac{1}{5}}$$ |  |  |  |  |  |  |  |  |  |  |  |
| $$f\left(x\right)=\frac{x}{x-1}$$ |  |  |  |  |  |  |  |  |  |  |  |
| $$g\left(x\right)=\frac{x}{\sqrt{x^{2}+1}}$$ |  |  |  |  |  |  |  |  |  |  |  |
| $$h\left(x\right)=\left|x^{2}-2x\right|$$ |  |  |  |  |  |  |  |  |  |  |  |
| $$f\left(x\right)=xe^{\frac{1}{x}}$$ |  |  |  |  |  |  |  |  |  |  |  |

