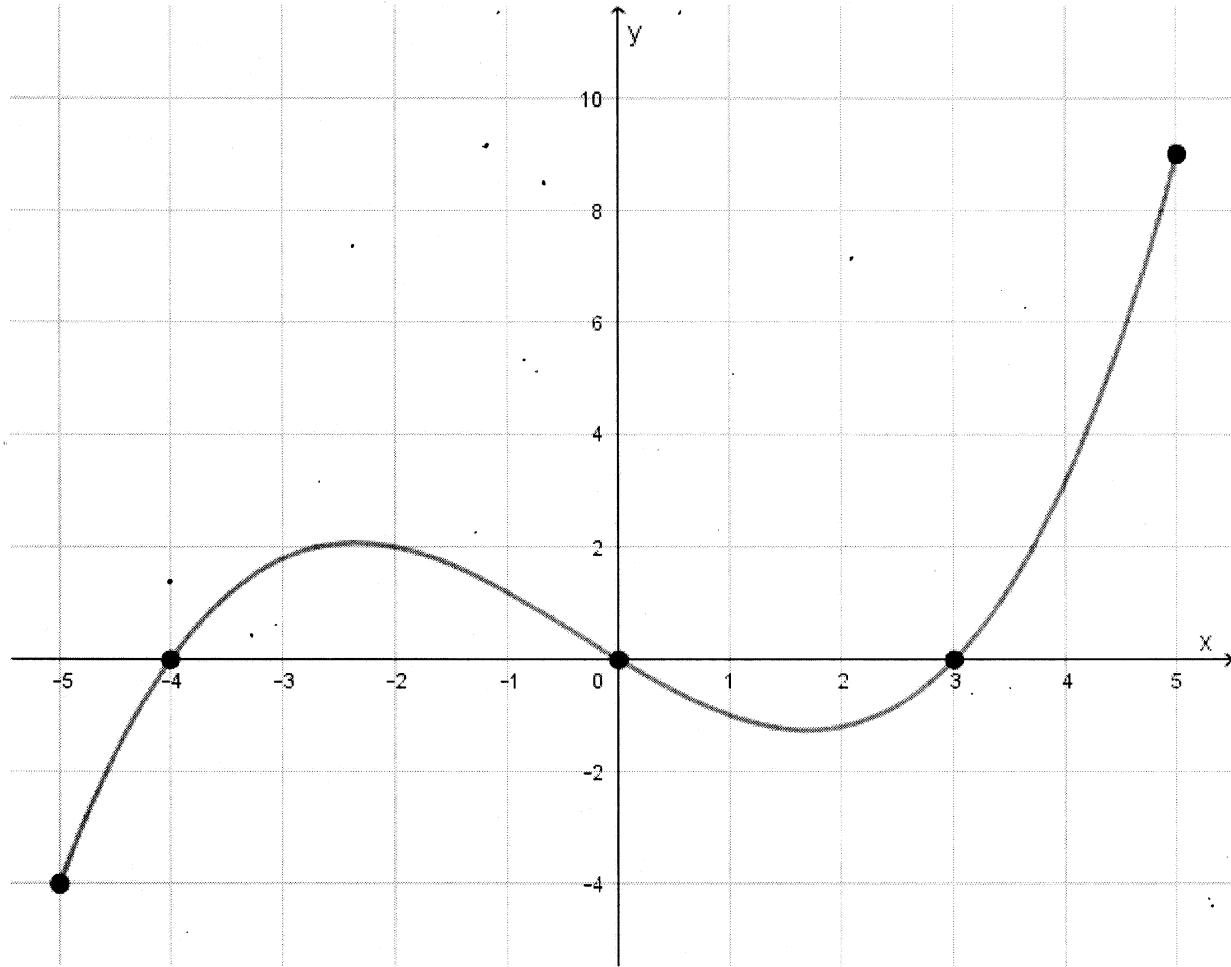


- The graph of the function f is shown below. Determine the domain and range of f . Determine intervals on which $f(x) > 0$ and intervals on which $f(x) < 0$. Determine open intervals on which f is increasing/decreasing. Determine any local minima or maxima.



- Domain = $[-5, 5]$
- Range = $[-4, 9]$
- $f(x) > 0$ on $(-4, 0) \cup (3, 5]$
- $f(x) < 0$ on $[-5, -4) \cup (0, 3)$
- f is increasing on about $(-5, -2.5) \cup (1.5, 5)$
- f is decreasing on about $(-2.5, 1.5)$
- Local min: $y \approx -1$ at $x \approx 1.5$
- Local max: $y = 2$ at $x \approx -2.5$