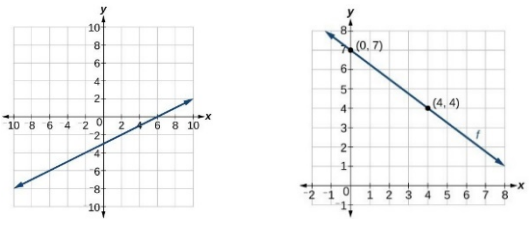
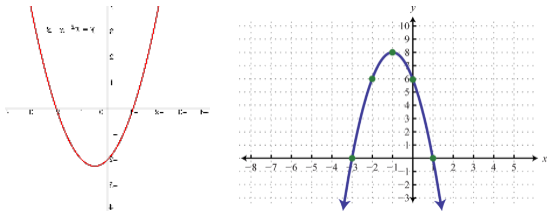
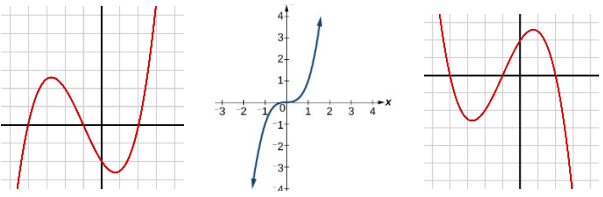
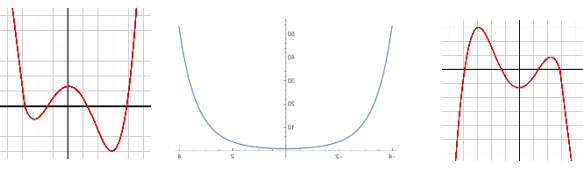
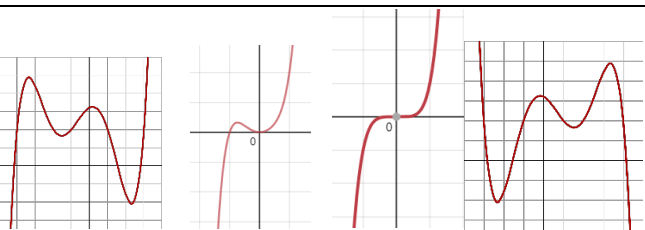


	Degree and Constant Differences	Concavity & Inflection Points & Extrema & Zeros	Sample Graph	End Behavior if leading coefficient > 0	End Behavior if leading coefficient < 0
Linear	1st degree constant 1st differences	0 concavity 0 inflection points 0 extrema 1 zero		As $x \rightarrow \infty$ $f(x) \rightarrow \infty$ As $x \rightarrow -\infty$ $f(x) \rightarrow -\infty$	As $x \rightarrow \infty$ $f(x) \rightarrow -\infty$ As $x \rightarrow -\infty$ $f(x) \rightarrow \infty$
Quadratic	2nd degree constant 2nd differences	1 concavity 0 inflection points 1 extrema up to 2 zeros		As $x \rightarrow \infty$ $f(x) \rightarrow \infty$ As $x \rightarrow -\infty$ $f(x) \rightarrow \infty$	As $x \rightarrow \infty$ $f(x) \rightarrow -\infty$ As $x \rightarrow -\infty$ $f(x) \rightarrow -\infty$
Cubic	3rd degree constant 3rd differences	2 concavities 1 inflection point 0 or 2 extrema up to 3 zeros		As $x \rightarrow \infty$ $f(x) \rightarrow \infty$ As $x \rightarrow -\infty$ $f(x) \rightarrow -\infty$	As $x \rightarrow \infty$ $f(x) \rightarrow -\infty$ As $x \rightarrow -\infty$ $f(x) \rightarrow \infty$
Quartic	4th degree constant 4th differences	1 or 3 concavities 0 or 2 inflection points 1 or 3 extrema up to 4 zeros		As $x \rightarrow \infty$ $f(x) \rightarrow \infty$ As $x \rightarrow -\infty$ $f(x) \rightarrow \infty$	As $x \rightarrow \infty$ $f(x) \rightarrow -\infty$ As $x \rightarrow -\infty$ $f(x) \rightarrow -\infty$
Quintic	5th degree constant 5th differences	2 or 4 concavities 1 or 3 inflection points 0, 2 or 4 extrema up to 5 zeros		As $x \rightarrow \infty$ $f(x) \rightarrow \infty$ As $x \rightarrow -\infty$ $f(x) \rightarrow -\infty$	As $x \rightarrow \infty$ $f(x) \rightarrow -\infty$ As $x \rightarrow -\infty$ $f(x) \rightarrow \infty$