Math 3   Name:_____
Unit 3 Day 2 CW(2)   Date:_____
State the degree, leading coefficient, and end behavior. Then match it to its graph.

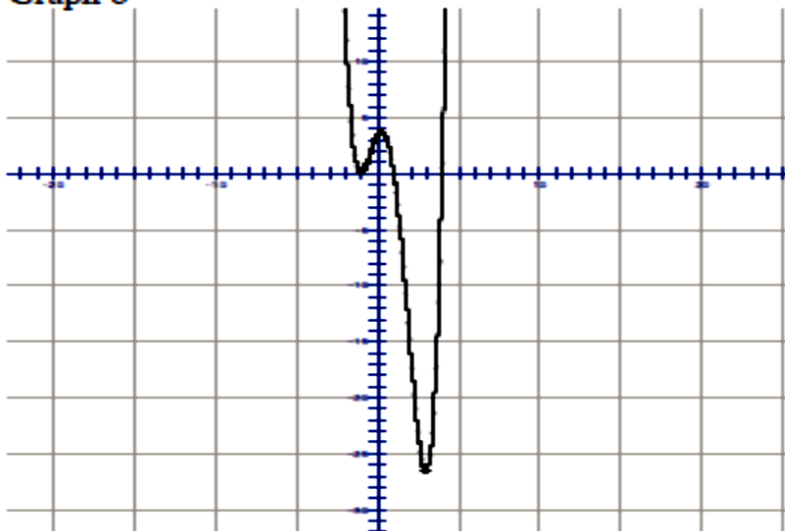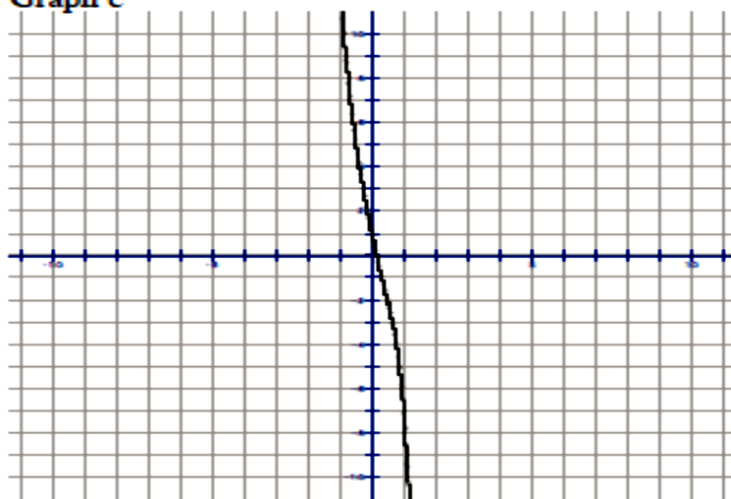| Polynomial Function	Degree	Leading Coefficient	End Behavior	Matching Graph
#1. $f(x) = \frac{5}{6}(x+1)^2(x-1)(x-4)$				
#2. $f(x) = x^4 - 2x^2 + 1$				
#3. $f(x) = -3x^5 + 2x^2 - 7x + 1$				
#4. $f(x) = x^3 - 5x$				
#5. $f(x) = -2x^4 + 4x^2 - 2$				
#6. $f(x) = x^5 - 2x^2 + 4$				

Graph a

Even or Odd Degree?

Positive or Negative Leading Coefficient?

End Behavior:
$x \rightarrow -\infty$, $y \rightarrow$
$x \rightarrow \infty$, $y \rightarrow$

Graph b

Even or Odd Degree?

Positive or Negative Leading Coefficient?

End Behavior:
$x \rightarrow -\infty$, $y \rightarrow$
$x \rightarrow \infty$, $y \rightarrow$

Graph c

Even or Odd Degree?
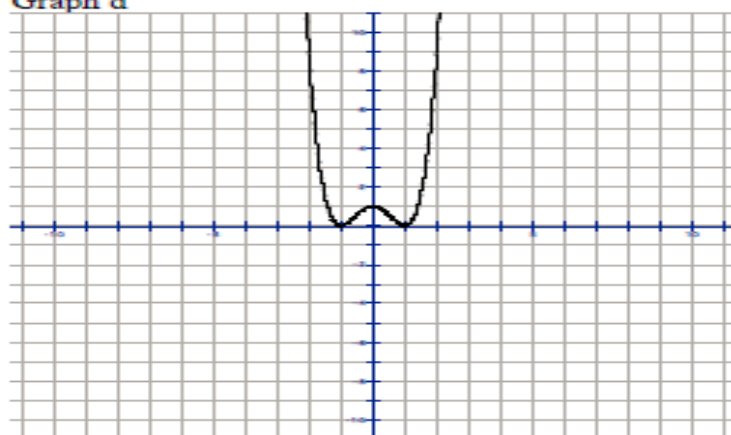
Positive or Negative Leading Coefficient?

End Behavior:
$x \rightarrow -\infty$, $y \rightarrow$
$x \rightarrow \infty$, $y \rightarrow$

Graph d
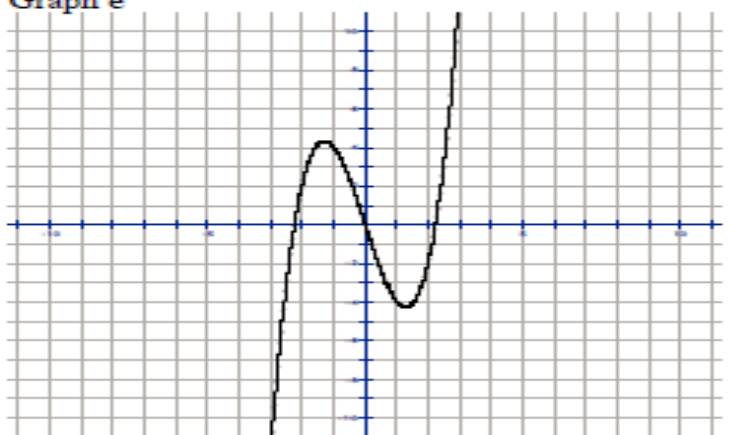

Even or Odd Degree?

Positive or Negative Leading Coefficient?

End Behavior:
$x \rightarrow -\infty$, $y \rightarrow$
$x \rightarrow \infty$, $y \rightarrow$

Graph e

Even or Odd Degree?

Positive or Negative Leading Coefficient?

End Behavior:
$x \rightarrow -\infty$, $y \rightarrow$
$x \rightarrow \infty$, $y \rightarrow$

Graph f

Even or Odd Degree?

Positive or Negative Leading Coefficient?

End Behavior:
$x \rightarrow -\infty$, $y \rightarrow$
$x \rightarrow \infty$, $y \rightarrow$

Degree:	Degree:
Leading Coefficient:	Leading Coefficient:
As $x \rightarrow -\infty,\ y \rightarrow$	As $x \rightarrow -\infty,\ y \rightarrow$
As $x \rightarrow +\infty,\ y \rightarrow$	As $x \rightarrow +\infty,\ y \rightarrow$
Degree:	Degree:
Leading Coefficient:	Leading Coefficient:
As $x \rightarrow -\infty,\ y \rightarrow$	As $x \rightarrow -\infty,\ y \rightarrow$
As $x \rightarrow +\infty,\ y \rightarrow$	As $x \rightarrow +\infty,\ y \rightarrow$