

LESSON 78

5. Zeros: -3 (multiplicity 1)
 1 (multiplicity 1)
 y -intercept: -3
End behavior: $f(x) \rightarrow \infty$ as $x \rightarrow -\infty$.
 $f(x) \rightarrow \infty$ as $x \rightarrow \infty$.
Both ends up

6. Zeros: -2 (multiplicity 1)
 0 (multiplicity 2)
 y -intercept: 0
End behavior: $f(x) \rightarrow \infty$ as $x \rightarrow -\infty$.
 $f(x) \rightarrow -\infty$ as $x \rightarrow \infty$.
Left end up and right end down

7. Zeros: 0 (multiplicity 1)
 1 (multiplicity 1)
 3 (multiplicity 1)
 y -intercept: 0
End behavior: $f(x) \rightarrow -\infty$ as $x \rightarrow -\infty$.
 $f(x) \rightarrow \infty$ as $x \rightarrow \infty$.
Left end down and right end up

8. Zeros: -2 (multiplicity 2)
 2 (multiplicity 2)
 y -intercept: -4
End behavior: $f(x) \rightarrow -\infty$ as $x \rightarrow -\infty$.
 $f(x) \rightarrow -\infty$ as $x \rightarrow \infty$.
Both ends down