ALG 2
Ch 6
Sec 6.2

Practice 6.2

For each function: a) State the degree (a +/- n odd/ev
b) Find the end behavior w/ justification
c) Find the zeros. State any multiplicities
d) Graph the function

1. $y = (x-5)^3$

2. $f(x) = -x^2(x-8)^2$

3. $y = (x-2)(x+3)^3$

4. $y = x^4 - 8x^3 + 16x^2$

5. $f(x) = -9x^3 + 81x$

6. $y = (2x+5)^3(x-3)^2$

Write a possible equation with the given conditions.

7. zeros at $x = 1$, multiplicity of 2
$x = -3$
with end behavior ↑ ↓

8. zeros at $x = 2$ } both have
$x = -2$ } multiplicity 2
with end behavior ↑ ↑