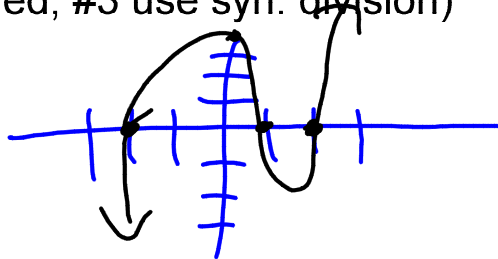


### Warm-up

Find the real zeros and sketch a graph.

(Hint: #1 and #2 can be factored, #3 use syn. division)

$$\begin{aligned}
 1.) f(x) &= x^3 - x^2 - 4x + 4 \\
 &= x^2(x-1) - 4(x-1) \\
 &= (x^2 - 4)(x-1) \\
 &= (x+2)(x-2)(x-1) \\
 x &= -2, 2, 1
 \end{aligned}$$



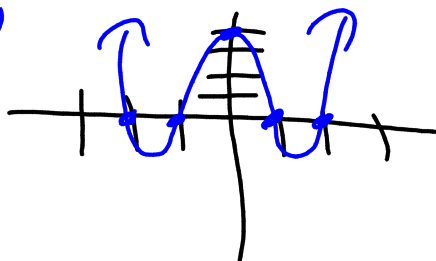
Oct 17-7:51 AM

### Warm-up

Find the real zeros and sketch a graph.

(Hint: #1 and #2 can be factored, #3 use syn. division)

$$\begin{aligned}
 2.) f(x) &= x^4 - 5x^2 + 4 \\
 &= (x^2 - 4)(x^2 - 1) \\
 &= (x+2)(x-2)(x+1)(x-1) \\
 x &= -2, 2, -1, 1
 \end{aligned}$$



Oct 17-7:51 AM

## Warm-up

Find the real zeros and sketch a graph.

(Hint: #1 and #2 can be factored, #3 use syn. division)

$f(x) = x^3 - 5x^2 + 2x + 8$

8: 1, 2, 4, 8  
 $\pm 1, 2, 4, 8$

$x^2 - 6x + 8$   
 $(x-4)(x-2)$   
 $x=4$   $x=2$

3.)

Oct 17-7:51 AM

Word Problem WS-due on Review Day

\*skip 2, 3, and 4

Oct 22-9:12 AM

Go over DLTs

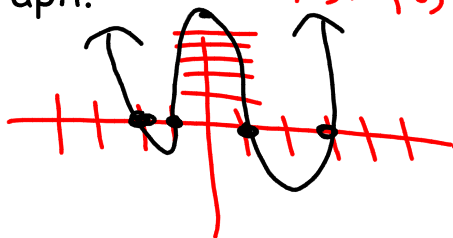
Nov 1-8:54 AM

$$f(x) = x^4 - x^3 - 7x^2 + x + 6$$

Review

- 1.) How many roots?  $4$
- 2.) List all the possible roots.  $\frac{6}{1} \frac{1, 2, 3, 6}{1} \pm 1, 2, 3, 6$
- 3.) Find all roots.  $-1, 1, 3, -2$
- 4.) Write the function in Intercept form.  
 $y = (x+1)(x-1)(x-3)(x+2)$
- 5.) Write the x and y -intercepts as ordered pairs.  
 $(-1, 0) (1, 0) (3, 0) (-2, 0) (0, 6) \times \text{int.}$
- 6.) Sketch a graph.

$x$  even



Oct 30-11:09 AM

Using a function behavior to describe leading coefficient & degree of a polynomial.

\*Work on Matching Cards

-yellow graph

-blue equation (intercept form)

-orange equation (standard form)

\*Find a group (no more than 4) break up the equations and graphs into:

+odd

-odd

+even

-even



Oct 19-9:25 PM

\*DLT!

Nov 3-7:16 AM

**\*Matching Game**  
(graphs with equations or sum/difference of  
cubes)

Nov 3-7:16 AM

## Test Covering Ch5

- > 5.4 Solve by factoring
- > 5.5 Solve by using synthetic/long division
- > 5.6 Solve using the Rational Zero Thrm
- > 5.8 Graphing -using a table, using the roots
- > 5.2 Graphing Properties- end behavior, #of roots, # of turns, etc
- > 5.7 Fund. Thrm of Algebra- write function given zeros
- > 5.3 Add, Subtract, Multiply polynomials
  
- >Word Problems

Oct 29-12:21 PM

\*MC questions    \*Factoring Bingo  
\*scavenger hunt    \*page swap    \*IXL.COM  
                                 \*Blue Sheets

<https://quizizz.com/admin/quiz/5aa992ee3e333d001b61edc7/higher-order-polynomials>

<https://quizizz.com/admin/quiz/59fa1ef9552f1a1400592cf7/factor-higher-order-polynomials>

<https://quizizz.com/admin/quiz/5a9efe213a777300197545db/solving-higher-order-polynomials>

Oct 22-9:24 AM

Homework:  
-Word Problem WS  
-Review WS

\*\*\*Test 11/9 and 11/12!!!!

Oct 20-11:31 AM