

Happy Tuesday, October 25!

Do Now:

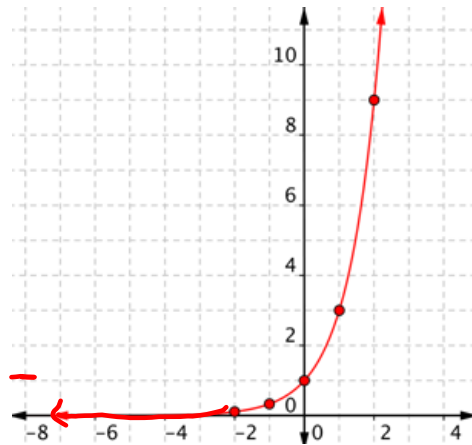
Domain? x

All Real
Number

Range?

$x \geq 0$

$x > 0$



Oct 25-7:38 AM

Quiz Tomorrow over IF7 Graphing

Formative, but if you receive a 4, you do not need to take the summative on Monday.

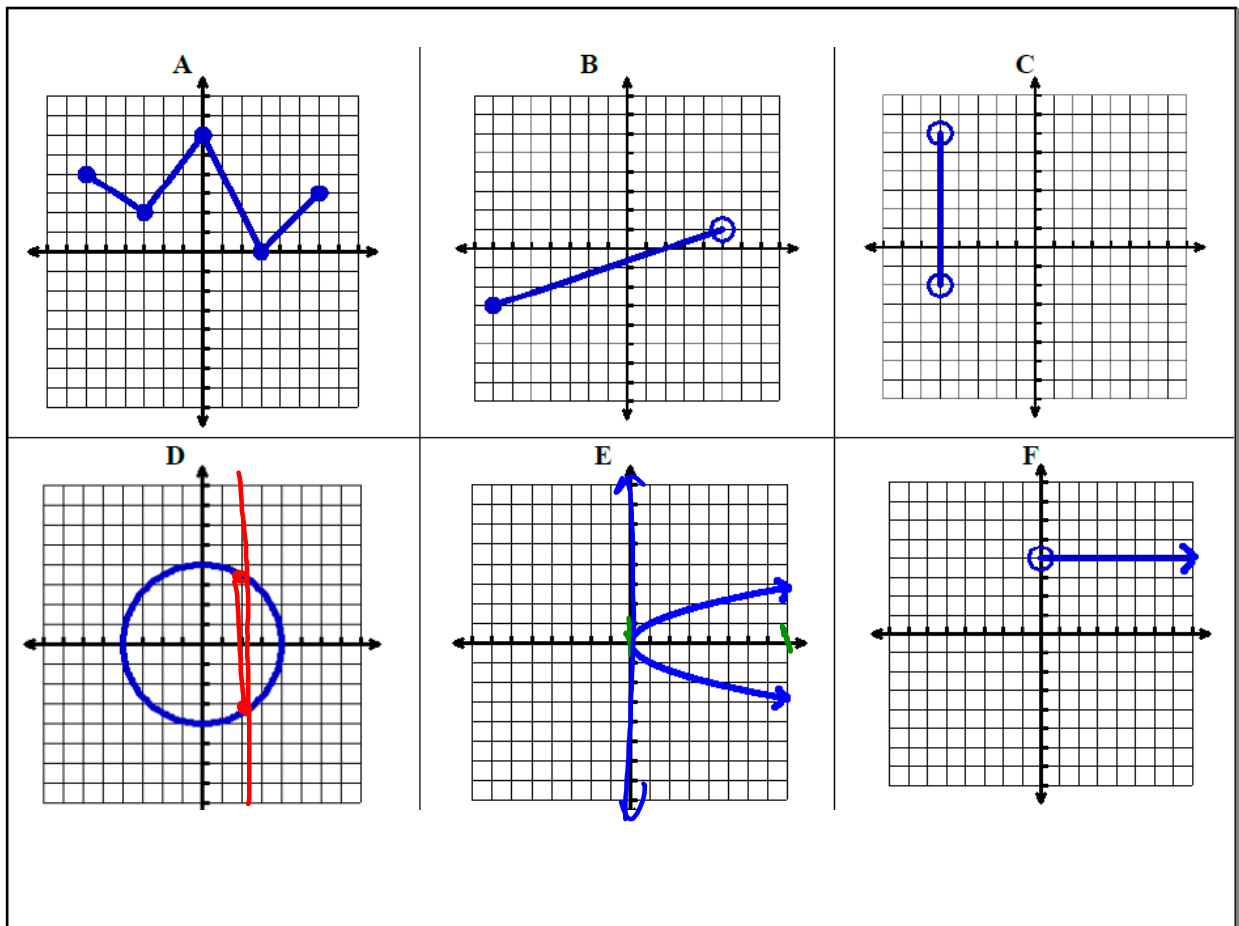
The review sheet is very closely related to the quiz...hint hint.

No calculators on the quiz.

Oct 25-9:32 AM

- | | | | |
|-------|--------|--------|--------|
| 1.) D | 7.) E | 13.) V | 19.) P |
| 2.) G | 8.) J | 14.) Q | 20.) M |
| 3.) H | 9.) L | 15.) N | 21.) R |
| 4.) F | 10.) B | 16.) X | 22.) W |
| 5.) A | 11.) K | 17.) U | 23.) S |
| 6.) C | 12.) I | 18.) O | 24.) T |

Oct 25-10:00 AM



Oct 25-9:50 AM

Graphing Polynomials

Step 1: Find Zeros

Step 2: Determine End Behavior

Step 3: Sketch graph

Oct 25-9:34 AM

Graphing Polynomials

Step 1: Find Zeros

Step 2: Determine End Behavior

Step 3: Sketch graph

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

$$x = 3$$

$$x = -4$$

$$x = -4$$

multiplicity
2

Oct 25-9:35 AM

Graphing Polynomials

Step 1: Find Zeros

Step 2: Determine End Behavior

Step 3: Sketch graph

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

odd
positive



How many zeros are there? That's your degree!

Lead coefficient?

positive

3

Oct 25-9:35 AM

Graphing Polynomials

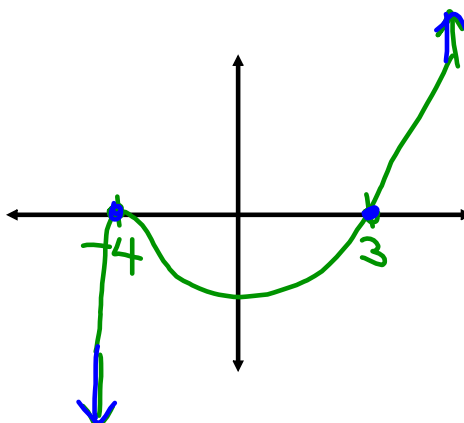
Step 1: Find Zeros

Step 2: Determine End Behavior

Step 3: Sketch graph

Put zeros on
End behavior

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

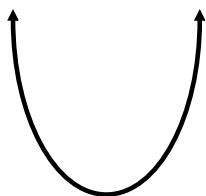


Oct 25-9:35 AM

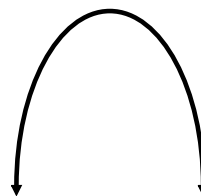
End Behavior:

Even Degree (number of zeros)

$$f(x) = 1(x+2)^2(x-3)^2$$



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

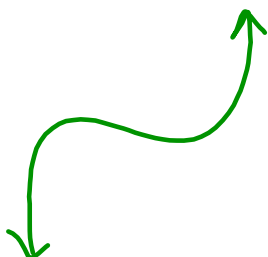


Oct 25-9:39 AM

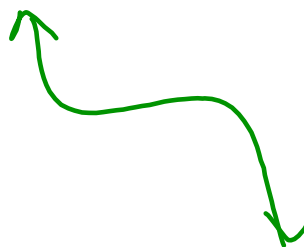
End Behavior:

Odd Degree (number of zeros)

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



$$f(x) = -x(x+2)^2(x-3)(x-9)$$



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Even Number of zeros

Oct 25-9:44 AM

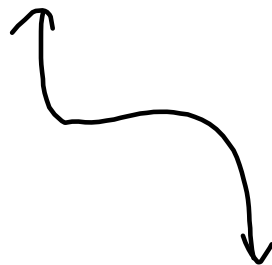
Odd Number of Zeros

Oct 25-9:45 AM

$$f(x) = \underline{-2}x^{\textcircled{4}} + 3x - 7$$

Oct 25-9:47 AM

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

odd
neg

Oct 25-10:44 AM

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

Oct 25-9:45 AM

$$f(x) = -6(x + 1)^2(x + 3)(x - 5)$$

Oct 25-9:46 AM

Sketch a graph with:

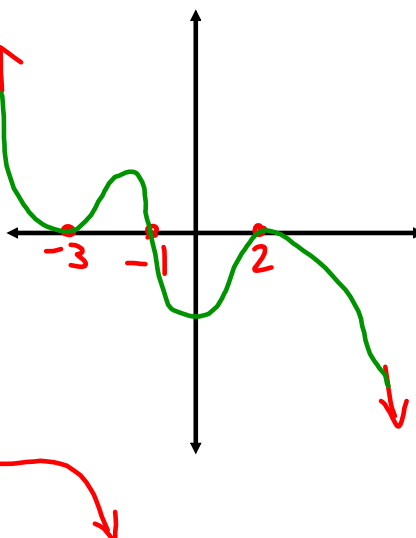
Zero at -3, multiplicity 2

-3, -3, -1, 2, 2
Zero at -1, multiplicity 1

Zero at 2, multiplicity 2

Leading coefficient -16

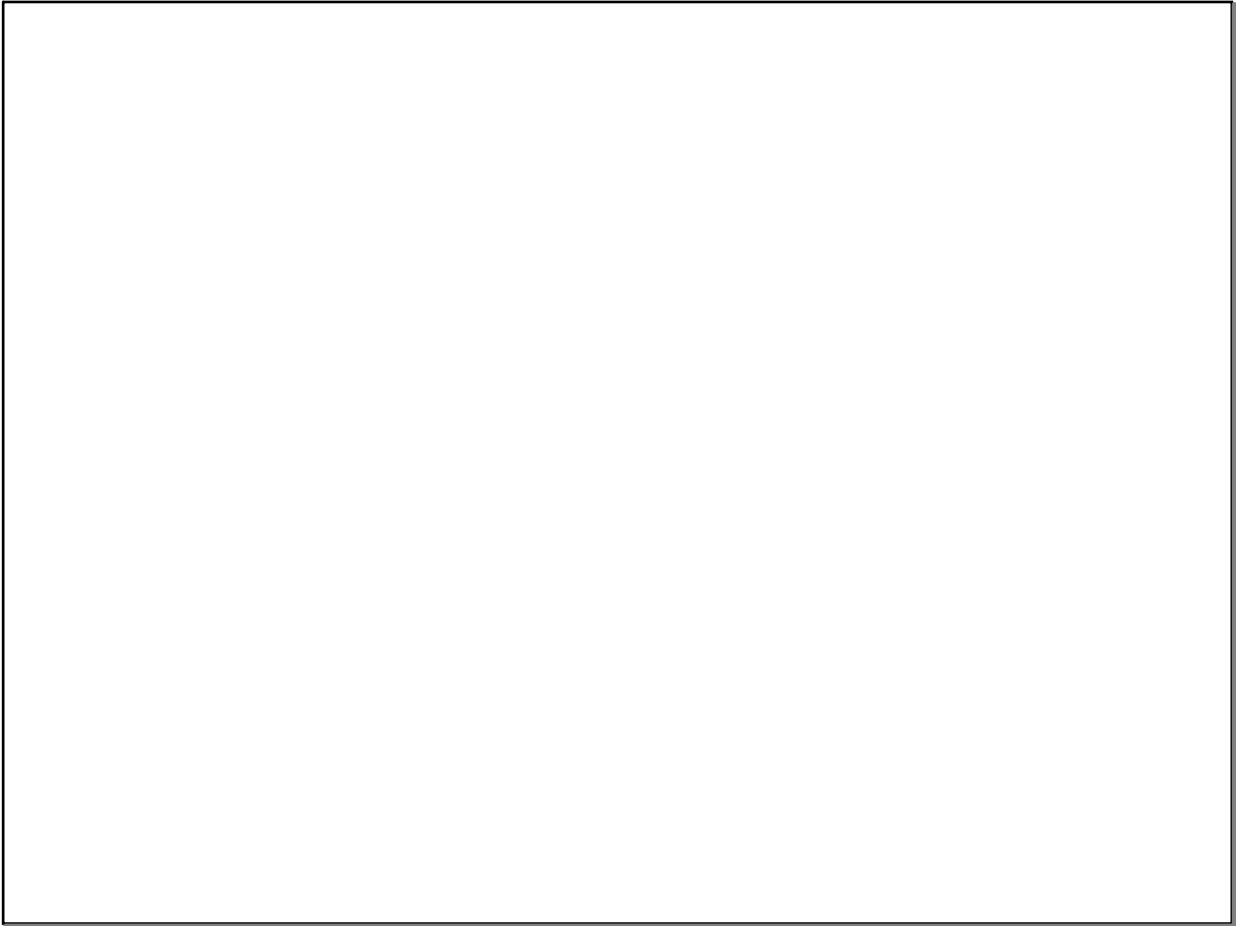
5 total Odd



Oct 25-9:47 AM

Homework: Complete Review worksheet!

Oct 25-9:49 AM



Oct 25-10:13 AM