



# Math Virtual Learning

# College Algebra

April 15, 2020



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## Lesson: April 15, 2020

**Objective/Learning Target:**  
Students will be able  
to graph, understand roots, zeros,  
factors and multiplicity of polynomials



## Warm Up Activity:

Click on the link below and practice  
Graphing on [DESMOS](#)

[Tutorial](#) - graph along with the tutorial



## Lesson:

Click on the links below and follow along with the lessons. We encourage you to have your own sheet of paper out and solve the guided practice problems with the teacher in the video.

[KA Video for Graphing Polynomials](#)  
[KA - Graphing with Multiplicity](#)



Try these practice problems first  
[Khan Academy Graphing Polynomials.](#)

The website provides interactive graphs with corresponding worked answers

**Practice:** Solve problems 1-5 on your own paper.  
Problems 6, 7, and 8 do interactively on KA

1) What are the zero's of  
$$f(x) = (x + 4)(x - 7)$$

2) The graph of  $G(x)$   
crosses the x-axis at  $(2,0)$ .  
What must be a root of  
the equation  $G(x)=0$ ?

3) The zero's of  $h(x)$  are -1 and 3. What  
are the factors of  $h(x)$ ?

4) Which zero's of  $f(x) = (x - 3)(x - 1)^3$   
has the multiplicity of 3?

5) Which zero of  $g(x) = (x + 1)^3(2x + 1)^2$   
is a double zero?

[6, 7, and 8](#)

## Practice Answers:

1)  $x = -4$ , and  $7$

2)  $2$

3)  $h(x) = (x + 1)(x - 3)$

4)  $x = 1$

5)  $x = -\frac{1}{2}$

6, 7, and 8 problems are interactively worked and checked on website



## Additional Practice:

If you would like more equations to practice, here is a link to extra practice and examples.

[Work Problems 27,29,30,31 -- scroll down for answers](#)