Algebra 1B Live Lesson

U4L9: Unit 4 Review
U4L1 to U4L5

Agenda

1. Review selected problems and topics from Unit 4, Lessons 1 – 5.

2. Use the 2-column note system to take better notes in math class. Bring your math notebook and pen or pencil to each math LiveLesson class.

2-Column Notes Template

1. Announcements/To Do's	1. Write down important details.
2. School-Wide Learner Outcomes	2. What are you going to work on this week?
3. LL Objectives	
4. Vocabulary words	4. Definitions (fill in as we go)
5. Problems	5. Steps to solving problems
6. Summary (End of class)	6. 1 or 2 sentences about the LL class.

Reminders and To – Do's

Information

1. Complete 1 math lesson per day.

2. Check your WebMail every day

3. Be prepared to spend 4 - 6 hours per day on schoolwork.

4. Remind your Learning Coach to take daily attendance

What to do

1. Go to your Planner in Connexus to find the math lesson for the day

2. Go to Connexus to find WebMail

3. Complete lessons for the day from your Planner. Do not get behind on lessons.

4. Have your Learning Coach log into Connexus daily.

Reminders and To – Do's

Information

What to do

5. Go to the Message Board first for information about our math class.

6. Contact Mr. Elizondo for math questions.

6. Call (559) 549 - 3244 and leave a voicemail if call is not answered.

Remember: You need at least 2 phone calls with Mr. Elizondo per semester.

Make an appointment at:
https://elizondo.youcanbook.me

Send a WebMail

Graph the function: $f(x) = x^2 - 7$

x	y
-2	-3
-1	-6
0	-7
1	-6
2	-3
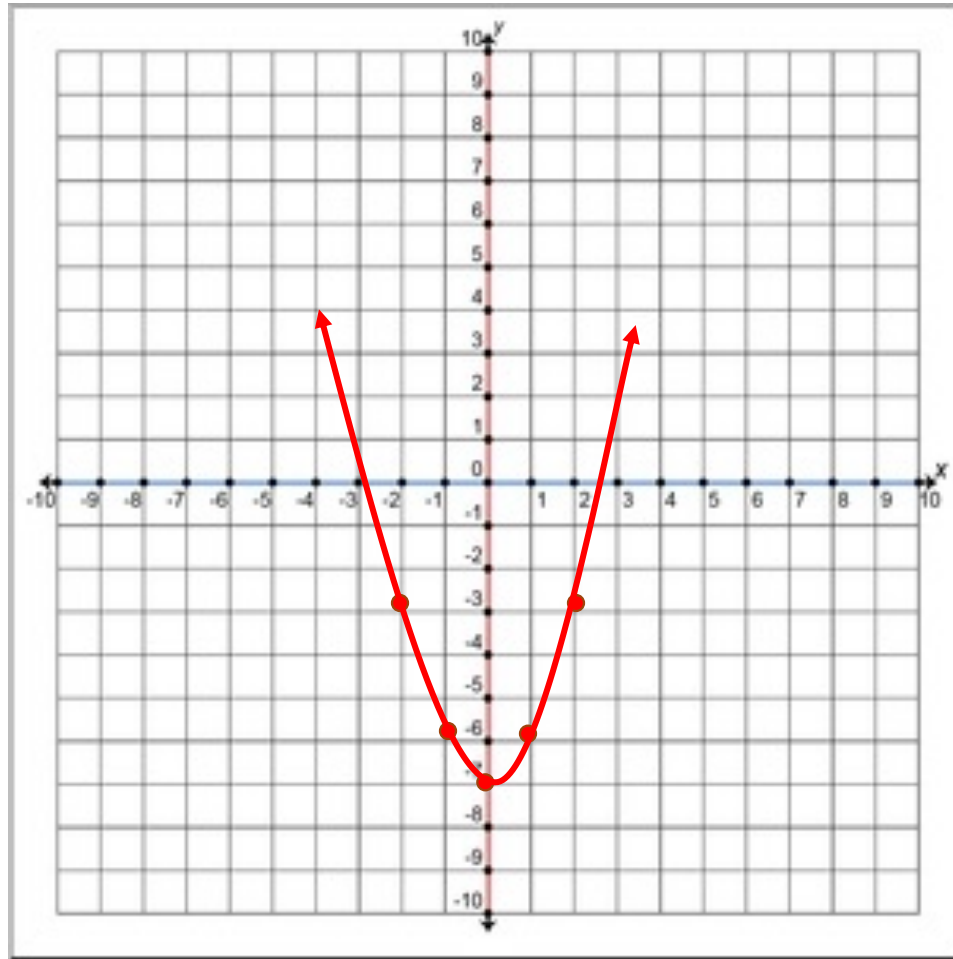
Find the equation of the axis of symmetry and the coordinates of the vertex of graph of the function: **f(x) = 3x² – 9x + 2**

equation for Axis of Symmetry: $x = \dfrac{-b}{2a}$

$$x = \frac{-(-9)}{2(3)} \qquad x = \frac{9}{6} = \frac{3}{2} \qquad \left(\frac{3}{2}, —\right)$$

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

$$f(x) = 3\left(\frac{3}{2}\right)^2 - 9\left(\frac{3}{2}\right) + 2$$

$$f(x) = 3\left(\frac{9}{4}\right) - \frac{27}{2} + 2$$

$$f(x) = \frac{27}{4} - \frac{27}{2} + 2$$

$$f(x) = \frac{27}{4} - \frac{54}{4} + \frac{8}{4}$$

$$f(x) = -\frac{19}{4}$$

$$\left(\frac{3}{2}, -\frac{19}{4}\right)$$

Solve the equation by finding square roots:

$2r^2 - 32 = 0$

$$2r^2 - 32 = 0$$

$$2r^2 - 32 + 32 = 0 + 32$$

$$2r^2 = 32$$

$$\frac{2r^2}{2} = \frac{32}{2}$$

$$r^2 = 16$$

$$\sqrt{r^2} = \sqrt{16}$$

$$\boldsymbol{r = \pm 4}$$

r = 4 or r = -4

Use the Zero-Product Property to solve each equation:

(4k + 5)(k + 7) = 0

$4k + 5 = 0$ $k + 7 = 0$

$4k + 5 - 5 = 0 - 5$ $\boldsymbol{k = -7}$

$4k = -5$

$\boldsymbol{k = -\dfrac{5}{4}}$

Solve by factoring: $2z^2 - 21z - 36 = 0$

a*c = 2*-36 = -72   1*-72, 2*-36, 3*-24   3z, - 24z

$$2z^2 + \underline{\quad} + \underline{\quad} - 36 = 0 \qquad\qquad 2z + 3 = 0 \qquad\qquad z - 12 = 0$$

$$2z^2 + -24z + 3z - 36 = 0 \qquad 2z + 3 - 3 = 0 - 3 \qquad \mathbf{z = 12}$$

$$(2z^2 + -24z) + (3z - 36) = 0 \qquad 2z = -3$$

$$2z(z - 12) + 3(z - 12) = 0 \qquad \mathbf{z = -\dfrac{3}{2}}$$

$$(2z + 3)(z - 12) = 0$$

Solve the equation by Completing the Square:

$$m^2 + 16m = -59$$

$$\frac{16}{2} = 8 \qquad 8^2 = 64$$

$$m^2 + 16m + 64 = -59 + 64 \qquad\qquad m + 8 - 8 = -8 \pm \sqrt{5}$$

$$(m+8)^2 = 5$$

$$m = -8 + \sqrt{5} \quad \text{or} \quad m = -8 - \sqrt{5}$$

$$\sqrt{(m+8)^2} = \sqrt{5}$$

$$m + 8 = \pm\sqrt{5}$$

Questions?

- Check the Message Board first

- Send a WebMail

- You can also make an appointment at https://elizondo.youcanbook.me

- You can also call me at (559) 549-3244. If I'm not available to answer your call, please leave a voicemail with your full name and phone number.