

Going Once, Going Twice...Sold!

Solving a System of Linear/Quadratic Functions



QUEST 2 ALGEBRA II

STATE FAIR OF TEXAS CURRICULUM

STUDENT EDITION

Recap
You will be
going to the
State Fair
of Texas to
experience the
Livestock Show and
Auction!

STATE FAIR MAP



Recall from your discussions in class:

- ★ You should now be able to put linear functions into slope-intercept form.
- ★ Can you use a calculator to find points of intersection between a linear and quadratic function?
- ★ View the following link again to brush up on details about the Livestock Show you're about to visit: <http://bigtex.com/livestock/livestockshow/>



Plan Your Route

- ★ Head over to the Livestock Judging Pavilion
- ★ Visit the cattle, horse, and swine barns
- ★ Finally peruse the poultry building



Optional Materials to Bring

- ★ Pen or Pencil
- ★ Notebook or Paper
- ★ Smartphone or Tablet



A Guernsey Cow. Source: <http://www.guernsey-butter.com/wp-content/uploads/sites/15/2014/10/40752600.jpg>

While You're There

You will use information you gather at the State Fair to help you with THREE project goals:

1. Compose a linear function from data you gather at the State Fair Livestock auction
2. Use an art project to design the "perfect" livestock animal, based on your research
3. Prepare a digital presentation on auctioneer careers.

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The objective of your visit today is to enjoy the auction while recording the final price of each.

- ★**GOING ONCE, GOING TWICE, SOLD!:** Use the sale price from 2 animals at the Fair to write a linear function.
 - o Check out the animals up for auction at the Fair
 - o **Go to the auction and record the price at which each animal is sold**
 - Pick your 2 favorites (don't lose your data of all animals)
 - o You can record your data on a device, a notebook, or use this table:

- ★**THE "PERFECT" ANIMAL:** As you make your way through the Livestock pavilions, look for animals that have won ribbons.
 - o How are they different from the others of their breed?
 - o Is there anything that stands out to you?
 - o If possible, interview some of the human participants and ask them what the judges are looking for in their animals in terms of appearance.
 - o Be sure to take photographs or create sketches of these animals.

Name of Animal	Auction Price



Back at School

When you return to class following your State Fair visit, you will work on your three projects. See your teachers for more information.