



POSITIVE IMPACT

When unforeseen **CHALLENGES** occur and new **OPPORTUNITIES** arise, the flexibility to deal with both is invaluable. That's why we're so grateful for both the Dean's Excellence Fund and the Friends of the K-State Libraries.

+ The Dean's Excellence Fund

If you want to understand exactly how your gift to K-State Libraries impacts students, campus life, research and academic growth, perhaps there's no better example than the Dean's Excellence Fund.

It's an account that can be used to help K-State Libraries cope in times of crisis and to act in moments of possibility.

No other fund has the same unrestricted potential.

For example, last summer, the Dean's Excellence Fund was used to improve Hale Library's InfoCommons and its wireless capacity. The InfoCommons



is the epicenter of academic activity on campus: It's where most of our 30,000+ weekly visitors spend part of their time studying, using the computers and printing.

After decades of heavy use, the furniture had to be replaced. At the same time, demand for wireless

connectivity exploded. In fact, K-State students' number one request was that we improve our wireless signal.

Donations to the Dean's Excellence Fund allowed us to create a more comfortable, tech-friendly space.





+ The Friends of the K-State Libraries

Funds from the Friends of the K-State Libraries have also been influential in both preserving and modernizing Hale Library.

In fact, they have raised more than \$1 million in the last 30 years.

Their efforts have funded massive, multi-year projects such as the professional restoration of the 1934 murals in old Farrell Library,

as well as smaller, critical items such as a 3D printer and the well-loved modular white boards.

None of this would have been possible without support from K-State alumni and friends.



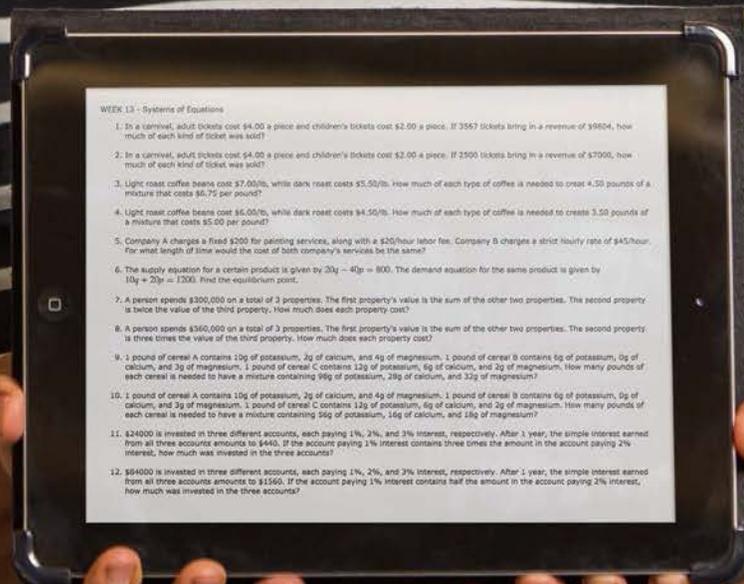
If you believe that a strong library system is essential to the future of Kansas State University, please consider a gift to the K-State Libraries.

www.found.ksu.edu/give/library

GIVE

Open/Alternative Textbook Initiative

saves students millions of dollars



Natarajan says K-State algebra students appreciate the availability of a free, online textbook.

WEEK 13 - Systems of Equations

1. In a carnival, adult tickets cost \$4.00 a piece and children's tickets cost \$2.00 a piece. If 3567 tickets bring in a revenue of \$9604, how much of each kind of ticket was sold?
2. In a carnival, adult tickets cost \$4.00 a piece and children's tickets cost \$2.00 a piece. If 2500 tickets bring in a revenue of \$7000, how much of each kind of ticket was sold?
3. Light roast coffee beans cost \$7.00/lb, while dark roast costs \$5.50/lb. How much of each type of coffee is needed to create 4.50 pounds of a mixture that costs \$6.75 per pound?
4. Light roast coffee beans cost \$6.00/lb, while dark roast costs \$4.50/lb. How much of each type of coffee is needed to create 3.50 pounds of a mixture that costs \$5.50 per pound?
5. Company A charges a fixed \$200 for painting services, along with a \$25/hour labor fee. Company B charges a strict hourly rate of \$45/hour. For what length of time would the cost of both company's services be the same?
6. The supply equation for a certain product is given by $23q - 40p = 800$. The demand equation for the same product is given by $10q + 23p = 1200$. Find the equilibrium point.
7. A person spends \$300,000 on a total of 3 properties. The first property's value is the sum of the other two properties. The second property is twice the value of the third property. How much does each property cost?
8. A person spends \$360,000 on a total of 3 properties. The first property's value is the sum of the other two properties. The second property is three times the value of the third property. How much does each property cost?
9. 1 pound of cereal A contains 10g of potassium, 3g of calcium, and 4g of magnesium. 1 pound of cereal B contains 6g of potassium, 0g of calcium, and 3g of magnesium. 1 pound of cereal C contains 12g of potassium, 6g of calcium, and 2g of magnesium. How many pounds of each cereal is needed to have a mixture containing 96g of potassium, 38g of calcium, and 32g of magnesium?
10. 1 pound of cereal A contains 10g of potassium, 2g of calcium, and 4g of magnesium. 1 pound of cereal B contains 6g of potassium, 0g of calcium, and 3g of magnesium. 1 pound of cereal C contains 12g of potassium, 6g of calcium, and 2g of magnesium. How many pounds of each cereal is needed to have a mixture containing 96g of potassium, 16g of calcium, and 18g of magnesium?
11. \$24000 is invested in three different accounts, each paying 1%, 2%, and 3% interest, respectively. After 1 year, the simple interest earned from all three accounts amounts to \$440. If the account paying 3% interest contains three times the amount in the account paying 2% interest, how much was invested in the three accounts?
12. \$64000 is invested in three different accounts, each paying 1%, 2%, and 3% interest, respectively. After 1 year, the simple interest earned from all three accounts amounts to \$1560. If the account paying 1% interest contains half the amount in the account paying 2% interest, how much was invested in the three accounts?