

Date _____ Topic _____

-----Main Ideas, Key Points, Formulas-----

-----Notes-----

Opportunity Costs

Net Opportunity Costs

Business decisions are affected by opportunity costs by...

When opportunity costs are not considered...

Calculating Opportunity Costs

-----Summary of Main Ideas-----

<p style="text-align: center;">Scenario 1</p> <p>Hank works at the local Dairy Queen making \$7.50 an hour. He normally has Friday night off, but he was called in to work from 5-11 p.m. Unfortunately, he was supposed to go out on a date with Claire on Friday – something he’s wanted to do for weeks. He had planned to go out to Applebee’s for supper and then catch a movie. What is Hank to do?</p>	<p style="text-align: center;">Scenario 2</p> <p>The high school volleyball team is going to watch the state finals this Friday. Josie would like to go with the team but knows that she will have to miss school. She has a big test in World History on Monday and would miss the review day. What is the best decision for Josie?</p>
<p style="text-align: center;">Scenario 3</p> <p>Jack is an avid football and baseball player, but he has never really been overly interested in basketball. He played in middle school but doesn’t know if he has too much interest in playing in high school. Jack’s mom told him he must either go out for basketball this winter or get a job after school and on the weekends. What should Jack do?</p>	<p style="text-align: center;">Scenario 4</p> <p>Evan just started his senior year and is starting to think about furthering his education after high school. Evan is considering going to the community college just 30 miles from home for two years before transferring to a four-year institution. However, Evan feels like he may be ready for the challenge of the four-year college right away and looks forward to starting there as a freshmen instead of transferring in two years. Yes, the cost is significantly more, but Evan gets good grades and may be able to get scholarships. What is the best option for Evan?</p>
<p style="text-align: center;">Scenario 5</p> <p>Emma has been an active member of the local FFA chapter for the past three years. She enjoys participating in Career Development Events and other activities but has also started an after school job at a daycare that she absolutely loves. Emma knows contest season is just around the corner, and she is pressed to decide between her after school job and participation in a CDE. What is the best decision for Emma to make?</p>	<p style="text-align: center;">Scenario 6</p> <p>Mrs. Smith, the math teacher, has had a hectic day at school. It’s already 5:30, and she is just now leaving. Before going home, she knows she needs to pick up some milk for her kids’ breakfast in the morning. She is debating between making a quick stop at Break Time on the edge of town or venturing into the town’s super market to pick up the milk. Yes, the milk will be more expensive at Break Time, but is it worth it?</p>
<p style="text-align: center;">Scenario 7</p> <p>Mr. Brown has become accustomed to having the neighbor boy mow his yard each week during the summer months. However, in May, Mr. Brown was laid off from his job and will now have more time to do the mowing himself. Yeah, the mower is not very comfortable for Mr. Brown, and he often has a backache for days. Would it be worth the extra money he wouldn’t have to pay to have his lawn mowed by the neighbor boy?</p>	<p style="text-align: center;">Scenario 8</p> <p>Tyler is a sophomore in college and is anxious to begin registering for next year’s classes. He will be taking a mix of classes for his major and general education classes. The general education classes are offered a number of times throughout the day, and Tyler is considering making his schedule not start before 10:00 on any given morning as he is not much of a morning person. Tyler does work at the admissions office on campus, so this would affect the hours he is able to work as the office is only open from 8-5 Monday through Friday. What options does Tyler have, and which is the best?</p>

Identifying Opportunity Costs

Kent has five \$100 bills to invest in the following returns. What combination gives Kent the best return? (He must invest in the first increment before investing in the second.)

Unit of Money	Bank	Walmart Stock	Home Depot Stock
1	103	171	164
2	103	171	165
3	103	172	165
4	103	163	164
5	103	161	163

What is Kent's return if he puts all his money in the bank?

What is the most profitable investment?

What is Kent's *net opportunity cost* between the most profitable investment and investing in the bank?

Identifying Opportunity Costs

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2	103	171	165
3	103	172	165
4	103	163	164
5	103	161	163

What is Kent's return if he puts all his money in the bank?

$$103 + 103 + 103 + 103 + 103 = 515$$

What is the most profitable investment?

$$171 + 171 + 172 + 164 + 165 = 843$$

What is Kent's *net opportunity cost* between the most profitable investment and investing in the bank?

$$843 - 515 = 328$$

Measuring Opportunity Costs

John has rented ten acres of non-irrigated land from his father for his Supervised Agriculture Experience Program and has to decide what to plant. Using the estimated *net returns* below, determine John's *opportunity cost* for each crop.

Crop	Net Return/Acre	Crop	Opportunity Cost
Corn	\$155	Corn	
Soybeans	\$172	Soybeans	
Wheat	\$-3	Wheat	
Sorghum	\$113	Sorghum	

A floral shop has a limited amount of money to stock the following options. Select the option that would be the most profitable by calculating *rate of return on the investment*.

	Option A	Option B	Option C
	Golden Pothos	Peace Lily	Bromelaid
Expense	\$14.00	\$21.00	\$19.00
Return	\$25.00	\$40.00	\$35.00
Net Return			
Rate of Return on Investment			

What is the best option of purchasing house plants for resale?

A landscaping business has a limited amount of money to stock the following options. Select the option that would be the most profitable by calculating *rate of return on investment*.

	Option A	Option B	Option C
	2" River Birch	3" Sweet Gum	2.5" Hackberry
Expense	\$80.00	\$75.00	\$57.00
Return	\$90.00	\$95.00	\$79.00
Net Return			
Rate of Return on Investment			

What is the best option of purchasing tree stock for resale?

Measuring Opportunity Costs

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Corn	\$155	Corn	\$172
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A floral shop has a limited amount of money to stock the following options. Select the option that would be the most profitable by calculating *rate of return on the investment*.

	Option A	Option B	Option C
	Golden Pothos	Peace Lily	Bromelaid
Expense	\$14.00	\$21.00	\$19.00
Return	\$25.00	\$40.00	\$35.00
Net Return	\$11.00	\$19.00	\$16.00
Rate of Return on Investment	78.57%	90.48%	84.21%

What is the best option of purchasing house plants for resale?

Option B

A landscaping business has a limited amount of money to stock the following options. Select the option that would be the most profitable by calculating *rate of return on investment*.

	Option A	Option B	Option C
	2" River Birch	3" Sweet Gum	2.5" Hackberry
Expense	\$80.00	\$75.00	\$57.00
Return	\$90.00	\$95.00	\$79.00
Net Return	\$10.00	\$20.00	\$22.00
Rate of Return on Investment	12.5%	26.67%	38.60%

What is the best option of purchasing tree stock for resale?

Option C

Opportunity Cost Booklet

Let's take a look at decisions we make on a daily basis and analyze the opportunity costs associated with those decisions. Below are the guidelines for this opportunity cost booklet.

Opportunity Cost Booklet

1. Choose 6 decisions we face on a regular basis – 2 should be personal decisions, 2 school- or work-related decisions, and 2 decisions related to your SAE program.
2. For each decision, create a page like or similar to the one below:

Decision 1

- Background information and/or scenario
- Comparison of each option
 - A –
 - B –
 - C –
- Identify Best Decision
- List of **opportunity costs** of that decision

3. At least three of these decisions must have a dollar figure associated where either net return or rate of return on investment can be calculated.
4. Secure each page in a folder or binder and include a cover page.

Opportunity Costs Booklet - 150 points

- Each page is worth 25 points
 - 5 points – legitimate decision chosen – 2 personal, 2 school- or work-related, 2 SAE-related
 - 5 points – information included to explain the scenario or situation
 - 5 points – comparison outline of each option
 - 5 points – identify best decision
 - 5 points – identify opportunity costs for that decision
- 3 pages must have net return or rate of return on investment calculated – 15 points total
- Pages are secured in a folder or binder and cover page is included – 10 points

Opportunity Cost Evaluation

Complete the questions below.

1. Define opportunity cost.
2. What is one way business decisions are affected by opportunity costs?
3. Describe the effect of a manager not considering opportunity costs.
4. How is net return calculated?
5. How is rate of return on investment calculated?
6. Which of the following measures can be used to represent opportunity costs when resources are limited?
 - a. Net Return
 - b. Rate of Return on Investment
 - c. Total Return
 - d. Total Expense
7. Which of the following values could be an opportunity cost?
 - a. \$2,000 net return from steer operation that was not selected
 - b. \$1,500 total return from an alternative that was not selected
 - c. \$200 expense for supplies in an alternative that was not selected
 - d. 1.25% rate of return on investment for the alternative selected
8. What would be the opportunity cost for selecting Option D if all options required a \$1750 investment?
 - a. Option A: \$2,000 net return
 - b. Option B: \$2,336 net return
 - c. Option C: \$2,950 net return
 - d. Option D: \$3,000 net return
9. List three limited resources that a manager must try to allocate to the best alternatives.
 - 1.
 - 2.
 - 3.
10. Todd has a part-time job. After six months of working, he has saved \$75. He wanted to spend it on a birthday gift for his brother and is considering concert tickets, a new CD player, compact discs, or a football. What will Todd's opportunity cost be if he decides to purchase the concert tickets?
 - a. Not purchasing his second choice
 - b. The purchase price of the football
 - c. A decrease in his savings account
 - d. Not buying some other item for himself

Farm Management CDE Practice Questions

A soybean producer decides to store his soybeans in the local elevator for 4 months. The price at harvest is \$11.00 per bushel, and the elevator charges 2 cents per bushel per month for storage plus a 5 cents per bushel handling charge. He has 5,000 bushels to sell and must borrow \$55,000 at 8% annual interest while he stores the soybeans. What price must he receive for his soybeans to break even and cover his storage and *opportunity costs*?

- A. \$11.12
- B. \$11.07
- C. \$11.44
- D. \$12.86
- E. None of the above

A producer is thinking about storing his corn in the local elevator for 5 months. The price at harvest is \$5.20 per bushel, and the elevator charges 2 cents per bushel per month for storage plus a 5 cents per bushel handling charge. He has 5,000 bushels to sell and would need to borrow \$30,000 at 6% annual interest while he stores the corn. What price must he receive for his corn to break even and cover his storage and *opportunity costs*?

- A. \$5.35
- B. \$5.48
- C. \$5.53
- D. \$5.61
- E. None of the above

A soybean producer decides to store his soybeans in the local elevator for 4 months. The price at harvest is \$9.40 per bushel, and the elevator charges 2 cents per bushel per month for storage plus a 5 cents per bushel handling charge. He has 5,000 bushels to sell and must borrow \$47,000 at 7% annual interest while he stores the soybeans. What price must he receive for his soybeans to break even and cover his storage and *opportunity costs*?

- A. \$9.53
- B. \$9.69
- C. \$9.75
- D. \$9.83
- E. None of the above

A soybean producer decides to store his soybeans in the local elevator for 5 months. The price at harvest is \$11.50 per bushel, and the elevator charges 2 cents per bushel per month for storage plus a 5 cents per bushel handling charge. He has 4,000 bushels to sell and must borrow \$50,000 at 6% annual interest while he stores the soybeans. What price must he receive for his soybeans to break even and cover his storage and *opportunity costs*?

- A. \$11.65
- B. \$11.86
- C. \$11.94
- D. \$12.34
- E. None of the above