Name _____ Date _____

Opportunity Cost: Scarcity, Choices and the Next-Best Alternative

Directions: Each question describes a choice, or a single change in the conditions behind a choice. Apply the concepts of scarcity and opportunity cost to determine the answer.

1. A classmate argues, "My town has no scarcity, because its stores never run out of anything." Which response reflects the way economists define scarcity?

A. Scarcity means human wants exceed the resources available to satisfy them, so the town still faces it.

B. Scarcity disappears once a community becomes wealthy enough to purchase whatever it wants.

C. The classmate is correct, because scarcity means that stores have run out of goods.

D. Scarcity affects only households with low incomes, so a town with well-stocked stores may avoid it.

2. Lena has one free Saturday and three possible ways to spend it. She values working an extra shift at $72, tutoring a neighbor at $64, and helping at her aunt's shop at $50. She can choose only one, and she selects the extra shift. What is the opportunity cost of her decision, in dollars?

_____ dollars

3. Jada receives a free ticket to a concert that will occupy her entire evening. The ticket is registered in her name and cannot be sold or transferred. If she skips the concert, her best alternative use of the evening is a car wash shift paying $40, which she values only for its wages. What is the opportunity cost of attending the concert?

A. The ticket's usual price, because that represents the ticket's value

B. $0, because the ticket itself cost her nothing

C. $40 plus the ticket's usual price, combined

D. $40, the wages from the car wash shift she gives up

4. Omar plans to spend the summer at a free robotics camp. His next-best alternative is a summer job, which he values only for its wages. The job's summer pay then increases from $3,000 to $4,000, while everything else remains unchanged. What happens to the opportunity cost of attending camp?

A. It remains $3,000, because that was the pay when he first compared his options.

B. It remains $0, because the camp itself charges no tuition.

C. It increases to $4,000, because the job he gives up is now worth more.

D. It increases to $7,000, the original pay and the new pay combined.

5. Marcus paid a nonrefundable $25 fee for a three-hour workshop. After the first hour he finds it useless, and friends invite him to a pickup basketball game he would enjoy more than the remainder of the workshop. According to economic reasoning, how should the $25 influence his decision to stay or leave?

A. He should remain until he has received $25 worth of value from the workshop.

B. He should leave only if the basketball game costs less than $25.

C. He should remain, so that the $25 fee is not wasted.

D. It should not influence his decision, because he cannot recover the $25 either way.

An Island's Production Possibilities

The table lists the combinations of fruit and grain an island can produce in a year when it

employs all of its land and workers fully and efficiently. Refer to it throughout this set.

Yearly output combinations for an island's farms

Combination	Fruit (tons)	Grain (tons)
A	0	120
B	20	110
C	40	90
D	60	60
E	80	0

6. The island moves from combination C to combination D. How many tons of grain must it sacrifice to gain those 20 additional tons of fruit?

_____ tons of grain

7. When the island moves from combination D to combination E, what is the average opportunity cost per additional ton of fruit, measured in tons of grain?

_____ tons of grain

8. As the island shifts production from combination A toward combination E, each step adds 20 tons of fruit. What happens to the amount of grain sacrificed at each step, and which change in how the farms use their resources could explain the pattern?

A. It remains constant, because every step adds the same 20 tons of fruit.

B. It increases, because the market price of fruit rises at each step.

C. It decreases, because farmers become more skilled at growing fruit with practice.

D. It increases. This can happen if farms use the resources best suited to fruit first and later shift resources better suited to grain into fruit production.

9. Match each output combination to its position relative to the island's production possibilities frontier.

Write the letter of the matching answer on each line.

1. _____ 60 tons of fruit and 80 tons of grain
2. _____ 40 tons of fruit and 90 tons of grain
3. _____ 40 tons of fruit and 70 tons of grain

A. Inside the frontier: attainable but inefficient

B. Outside the frontier: attainable but wasteful

C. On the frontier: productively efficient

D. Outside the frontier: unattainable with current resources

10. A new irrigation technique allows the island's farms to produce more fruit and more grain using the same land and workers. How does this development affect the island's production possibilities?

A. The island moves along its existing frontier toward more fruit.

B. The frontier shifts inward, because farmers must spend time learning the technique.

C. Nothing changes, because the island still has the same land and workers.

D. The frontier shifts outward, so some previously unattainable combinations become possible.