## Accounting vs Economic Profit

1. All of the following are included in the calculation of accounting profit EXCEPT which of option? a. explicit costs $b$. variable costs $c$. total revenue d. fixed cost e. implicit costs

Economic profits are less than accounting profits because economic profits include implicit costs and explicit costs, but accounting profit only includes explicit cost.
2. Which of the following best describes what a firm's objective is? a. maximize accounting profit b. Maximize total utility c. Maximize total revenue d. Minimize total costs e. maximize economic profit
3. What must true if a firm is only earning a normal profit? a. Economic profits are positive. b. Accounting profits equal zero. c. Economic profits are negative, d. Economic profits equal zero. e. Accounting profits are negative.

The definition of normal profit is earning zero economic profits. A firm may still be earning accounting profits even if its economic profit is zero.
4. If firms in an industry earn less than a normal profit, a. some existing firms will exit. b. the price of the industry's product will eventually fall. c. new firms will enter. d. the price of the industry's product will eventually rise. e. supply will increase.
5. Which of the following is the difference between accounting profit and economic profit? a. Accounting profit considers all costs. b. Economic profit considers only implicit costs. c. Normal profit. d. Equal to excess profit. e. Zero.
6. If accounting profit is less than normal profit, then the firm is earning $a$. an economic loss. b. an economic profit. c. an excess profit. d. a negative accounting profit. e. a profit equal to opportunity cost.
7. Assume that you own your own business and your explicit costs are $\$ 10,000$ per year. You could earn $\$ 11,000$ in your next-best alternative job. Your revenue is $\$ 22,000$ per year. What is your accounting profit? a. $\$ 1000$. b. $\$ 2000$. c. $\$ 11,000$. d. $\$ 12,000$. e. $\$ 22,000$.
8. T-Rex Enterprises produces and sells dinosaur costumes in a competitive market. The total cost of producing 100 dinosaur costumes is $\$ 9000$. The price of a dinosaur costume is $\$ 80$. What is this firm's economic profit (or loss)?a. $\$ 8020$, b. $-\$ 1000$. c. $\$ 9000$ d. $\$ 8000$ e. $-\$ 2000$

```
Economic profit is the difference between a firm's total revenue and its total cost:
Economic profit = Total revenue - Total costs
    =($80\times100)-$9000
    =$8000-$9000
    = -$1000
```

9. Nakawé, LLC produces and sells greeting cards in a competitive market. The total cost of producing 1000 greeting cards is $\$ 4000$. The price of a greeting card is $\$ 4$. What is this firm's economic profit (or loss)? a. \$0, b. \$2,400, c. $-\$ 3996$, d. \$4000, e. $\$ 1600$.
```
$O
Economic profit is the difference between a firm's total revenue and its total cost:
    Economic profit = Total revenue - Total costs
                        =($4}\times1000)-$400
=$4000 - $4000
    =$0
```

10. amanik Unlimited produces and sells 10,000 , greeting cards in a competitive market. It has explicit costs of $\$ 4,000$ and opportunity cost of capital of $\$ 1,000$. If the owner of Yamanik Unlimited closed her business for good and took another job, she could be earning $\$ 31,000$ per year. The price of a greeting card is $\$ 5$. What is Yamanik Unlimited's economic profit? a. $\$ 45,000$ b. $\$ 15,000$ c. $\$ 14,000$ d. $\$ 46,000$. E. $\$ 12,000$
```
$14,000
The firm has total revenue of:
$5 < 10,000=$50,000
and total costs of:
$4000 + $1000 + $31,000=$36,000
Economic profit is the difference between total revenue and total cost.
```

11. When Yooko Industries makes 2000 widgets, the cost of producing a typical widget is $\$ 5$ which includes implicit costs of $\$ 2$. What is Yooko Industies economic profit (or loss) and accounting profit (or loss) if the price of a widget is $\$ 4$ ?
a. Economic Profit $=-2000$ (a loss); Accounting Profit $=\$ 2000$
b. Economic Profit $=-\$ 4000$ (a loss); Accounting Profit $=\$ 2000$
c. Economic Profit $=\$ 2000$ (a loss); Accounting Profit $=\$ 4000$ d. Economic Profit $=-\$ 4000$ (a loss); Accounting Profit=\$4000.
e. Economic Profit $=\$ 4000$ (a loss); Accounting Profit=\$4000

Economic profit $=-\$ 2000$ (a loss);
Accounting profits $=\$ 2000$
When you are given prices and average total cost, economic profit is calculated as
$(P-A T C) \times Q$.
For Yooko Industries this is: $(\$ 4-\$ 5) \times 2000=-\$ 2000$
Accounting costs are calculated using explicit costs only, so accounting profits are:
$(\$ 4-\$ 3) \times 2000=\$ 2000$
12. In 2018, Arctic Enterprises produced and sold 500 sleds in a competitive market at a price of $\$ 100$ each. The cost of materials and labor was $\$ 7,000$. The opportunity cost of capital was $\$ 10,000$ and the opportunity cost of the entrepreneur's time was $\$ 40,000$. What is Arctic Enterprises' economic profit? a. $\mathbf{- \$ 7 , 0 0 0}$ b. $\$ 33,000$ c. $\$ 43,000$ d. $\$ 3,000$
$-\$ 7,000$
The firm has total revenue of
$\$ 100 \times 500=\$ 50,000$
and total costs of $\$ 7,000+\$ 10,000+\$ 40,000=\$ 57,000$.
Economic profit is the difference between total revenue and total cost.
13. Michonne's Mystery Meats, LLC produces 100 pounds of meat each day and sells it at a price of $\$ 9$. The average total cost of producing each pound of meat is $\$ 6$. What is this firm's economic profits? a. $\$ 3$ b. $\$ 300$ c. $\mathbf{- \$ 3 0 0}$ d. $\$ 100$ e. $\mathbf{- \$ 3}$
$\$ 300$
This firm earns $\$ 9-\$ 6=\$ 3$ in profit on each of the 100 pounds of meat it sells. Therefore, it earns a total of $\$ 300$ in profit.
14. A firm produces 200 pies and sells each pie for $\$ 20$. The explicit costs of making the pies is $\$ 2000$. Additionally, the opportunity cost of the firm's owner is $\$ 1000$, and the building the firm is in could be rented to someone else for $\$ 700$. What is this firm's economic profit? a. $\$ 4000$ b. $\$ 2000$ c. $\$ 1300$ d. $\$ 1000$ e. $\$ 300$
$\$ 300$
The firm has total revenue of $\$ 20 \times 200=\$ 4000$ and total costs of
$\$ 2000+\$ 1000+\$ 700=\$ 3700$
Economic profit is the difference between total revenue and total cost.

## Problem/Short Answer

Assume you own and manage your own fruit stand. The financial information for the stand is given below (all values are monthly).

| Wholesale fruit cost | $\$ 2000$ |
| :--- | :--- |
| Labour | $\$ 800$ |
| Fruit stand lease | $\$ 1000$ |
| Monthly revenue | $\$ 5000$ |

Answer each of the following, based on the information provided.
a. Calculate your accounting profit.
b. If your other employment opportunity is to earn $\$ 1000$ per month working at a $t$-shirt stand (and you are equally happy selling fruit or t -shirts), what is your economic profit? Should you continue selling fruit? Explain.
c. What happens to your economic profit if you enjoy selling $t$-shirts and would be willing to forgo up to $\$ 250$ per month to work selling t-shirts rather than fruit? Should you continue selling fruit? Explain.

1a. $\quad$ Accounting profit $=T R-$ (total explicit costs) $=\$ 5000-\$ 3800=\$ 1200$.
b. Economic profit $=T R-($ total implicit and explicit costs $)=\$ 5000-(\$ 3800+\$ 1000)=\$ 5000-$ $\$ 4800=\$ 200$. Yes, because economic profit is positive.
c. Economic profit becomes $-\$ 50 . \$ 5000-(\$ 3800+\$ 1000+\$ 250)=\$ 5000-\$ 5050=-\$ 50$. No, because economic profit is negative.

Assume that you own, manage, and are the only employee for a $t$-shirt concession at a university sports arena. The financial information for the business is given below.

| Retail price of shirt | $\$ 15$ |
| :--- | :--- |
| Number of shirts sold per day | 100 |
| Cost of plain t-shirt | $\$ 5$ each |
| Cost of t-shirt design | $\$ 5$ each |
| Equipment rental fee (per day) | $\$ 100$ |
| Stand rental fee (per day) | $\$ 200$ |

a. What is your accounting profit?
b. Your next-best alternative job is to work as a manager for another local retail business. If your economic profit is zero, how much could you earn as a manager for another business?
c. Assume you enjoy owning and operating the $t$-shirt stand (you value it at $\$ 100$ per day). If your total costs increase to $\$ 1600$, and if you shut down total cost would be zero, should you continue selling tshirts? Explain.

## Problems/Short Answer

1a. $\quad T R=\$ 15 \times 100=\$ 1500$
$T C($ explicit $)=\$ 5 \times 100+\$ 5 \times 100+\$ 100+\$ 200=\$ 1300$.
Accounting profit $=\$ 1500-\$ 1300=\$ 200 /$ day .
b. If economic profit is zero, then your next-best alternative (that is, your opportunity cost) must equal $\$ 200$ per day. $T R-T C($ implicit + explicit $)=0$, so implicit cost $($ opportunity cost $)=T R-T C($ explicit $)=$ $\$ 1500-\$ 1300=\$ 200$.
c. No, you should not continue selling t -shirts. Accounting profit now equals $\mathbf{- \$ 1 0 0}$. Even though you value the work at $\$ 100$, you should shut down the stand. The $\$ 100$ value of working at the stand covers the accounting loss, but you cannot cover your opportunity cost (the income from working in another job).
2. The question is: how much money would you need to put in the bank at 10 percent interest to generate annual earnings of $\$ 200,000$ (i.e., $\$ 500,000-\$ 300,000$ )? Let $X$ denote that amount in the equation $X(0.1)=\$ 200,000$ and solve: $X=\$ 200,000 / 0.1=\$ 2,000,000$.

