



## Worksheet – Opportunity cost

**Related news article:** [Balancing the value of time and money](#) (Forbes, May 25, 2023)

**Summary:** This worksheet could be used for in-class or homework practice. Students will be asked to read a short article about the trade-off between work and personal time. The article also provides some useful tips for a good work – life balance. Then, students will be asked to identify the opportunity cost of running a business, draw a graph that shows the trade-off between work and personal time, and analyze the costs and benefits of working on an extra task. **Answers are provided at the end of this document.**

### Learning objectives:

At the end of this worksheet, students will be able to:

- o Understand the concept of scarcity;
- o Analyze a real-world scenario to determine the opportunity cost of running a business;
- o Calculate the opportunity cost of an action given the costs and the value an individual places on a set of alternative activities;
- o Understand the trade-off between work and personal time;
- o Analyze the marginal cost and the marginal benefit of working on an extra task.

**Economics concepts:** Opportunity cost, Scarcity, Trade off, Marginal cost, Marginal benefit, Production possibilities frontier

### Suggested excerpts:

“... it’s necessary to put in the work to grow your business and properly service clients, but at what cost?”

“The cost I’m referring to isn’t the monetary value of your services, but the opportunity cost of your time. Time is one of our scarcest resources...”

“When you look at your calendar and day-to-day tasks, how much of your time is being drained by the little things that we often don’t put much thought into? For example, continued follow-up on unanswered emails or back-and-forth conversations.”

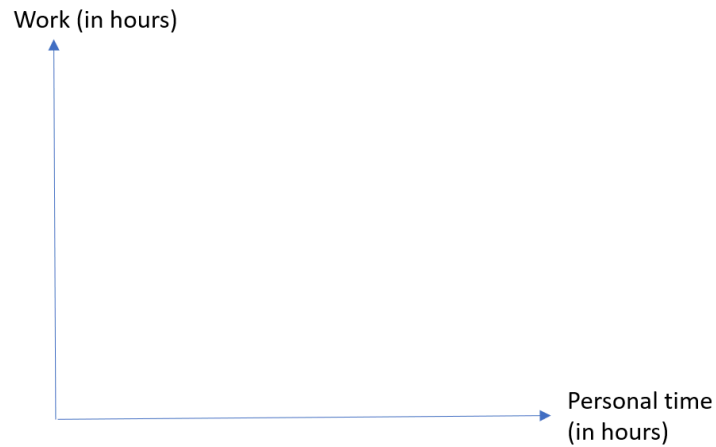
“Here are a few tips that help guide me [the author of the article] through balancing my time better:”

“When you start that initial analysis of your schedule, make sure there is time set aside for mental breaks—and be honest with yourself about the ratio of work time versus personal time.”

“Creating and prioritizing to-do lists is a must. How much time will each task take you? Once you estimate that, hold yourself accountable by scheduling them into your calendar.”

## Questions

1. The fact that people often say that “there aren’t enough hours in the day” implies that time is:
  - a. A public good.
  - b. A scarce resource.
  - c. A natural resource.
  - d. Unlimited.
2. Suppose that you own a business. What would be the opportunity cost of growing your business and servicing your clients well?
3. Suppose that a meeting you are attending ends 15 minutes earlier than scheduled. You are considering either going for a quick walk in the park close to your workplace, or working on a business project, or chatting with a colleague. Suppose that the walk costs you nothing and you value it at \$25; working on the business project costs you \$10 and you value the completed work at \$30; and chatting with colleagues costs you nothing and you value the interaction at \$15. What is the opportunity cost of chatting with colleagues during the “unexpected free 15 minutes”?
  - a. \$25
  - b. \$20
  - c. \$15
  - d. \$0
4. If a businessperson wants to devote more time to his job, he has to give up some personal time. This means that there is a(an) \_\_\_\_\_ between work time and personal time.
  - a. Incentive.
  - b. Marginal cost.
  - c. Trade-off.
  - d. Production function.
5. Suppose that you sleep 8 hours a day. Further, assume that on a regular weekday, you could choose how many of the remaining 16 hours to use for work. The time you do not use for work or sleep is your personal time. The vertical and the horizontal axes on the graph below show the number of hours of work, and the number of hours of personal time on an average weekday, respectively. Draw a curve that shows different combinations of hours of work and personal time on a weekday that would utilize all the time you are awake (16 hours).



6. The article recommends three strategies for a good work-life balance: setting time aside for mental breaks, creating a to-do list with estimated time for each task, and having a plan what to do during unplanned “open blocks of time.” Have you ever tried any of these tips? What are the costs and benefits of each of these strategies?
7. Suppose that you are simultaneously attending a business meeting and responding to clients’ emails. You are thinking of starting to write a business report at the same time, too. What are the marginal cost and the marginal benefit of starting to work on this extra task?

## Answer Key

1. The fact that people often say that “there aren’t enough hours in the day” implies that time is:

- a. A public good.
- b. A scarce resource.
- c. A natural resource.
- d. Unlimited.

**Answer: B.**

2. Suppose that you own a business. What would be the opportunity cost of growing your business and servicing your clients well?

**Answer: Answers will vary. The opportunity cost is the highest-valued alternative that you would have to give up to grow your business and to service your clients well. The opportunity cost might vary across individuals. In this scenario, it might be spending more time with your family, or taking a class, or sleeping more, etc.**

3. Suppose that a meeting you are attending ends 15 minutes earlier than scheduled. You are considering either going for a quick walk in the park close to your workplace, or working on a business project, or chatting with a colleague. Suppose that the walk costs you nothing and you value it at \$25; working on the business project costs you \$10 and you value the completed work at \$30; and chatting with colleagues costs you nothing and you value the interaction at \$15. What is the opportunity cost of chatting with colleagues during the “unexpected free 15 minutes”?

- a. \$25
- b. \$20
- c. \$15
- d. \$0

**Answer: A. The opportunity cost of chatting with colleagues is the higher-valued alternative that you would have to give up to chat. The net value of going for a quick walk in the park is \$25, while the net value of working on a business project is  $(\$30 - \$10) = \$20$ . The net value of the walk is higher for you. Therefore, the opportunity cost of chatting with a colleague is the**

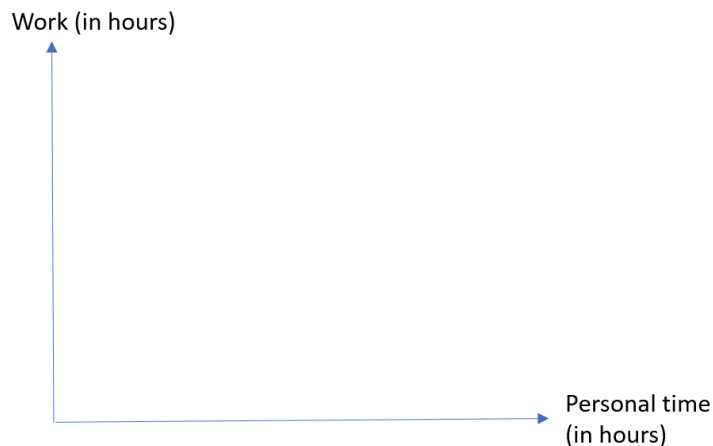
cost of chatting with this colleague (\$0) plus the forgone net value of walking in the park (\$25), i.e., \$25.

4. If a businessperson wants to devote more time to his job, he has to give up some personal time. This means that there is a(an) \_\_\_\_\_ between work time and personal time.

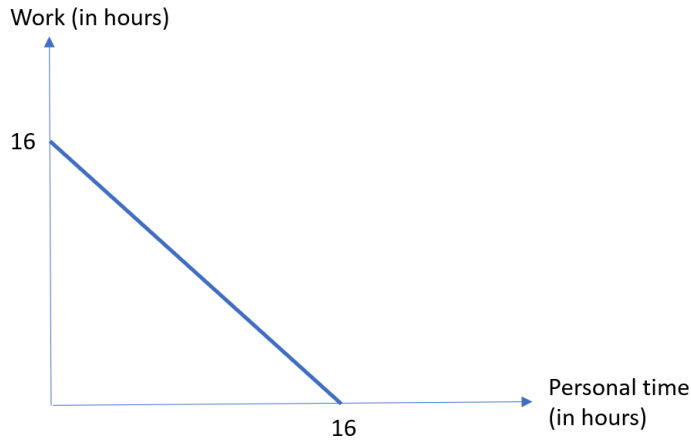
- a. Incentive.
- b. Marginal cost.
- c. Trade-off.
- d. Production function.

**Answer: C.**

5. Suppose that you sleep 8 hours a day. Further, assume that on a regular weekday, you could choose how many of the remaining 16 hours to use for work. The time you do not use for work or sleep is your personal time. The vertical and the horizontal axes on the graph below show the number of hours of work, and the number of hours of personal time on an average weekday, respectively. Draw a curve that shows different combinations of hours of work and personal time on a weekday that would utilize all the time you are awake (16 hours).



**Answer: You could spend 16 hours working, or 16 hours relaxing, or (x) hours working and (16 – x) hours relaxing. The following is the requested graph:**



6. The article recommends three strategies for a good work-life balance: setting time aside for mental breaks, creating a to-do list with estimated time for each task, and having a plan what to do during unplanned “open blocks of time.” Have you ever tried any of these tips? What are the costs and benefits of each of these strategies?

**Answer: Answers will vary.**

7. Suppose that you are simultaneously attending a business meeting and responding to clients’ emails. You are thinking of starting to write a business report at the same time, too. What are the marginal cost and the marginal benefit of starting to work on this extra task?

**Answer: Answers will vary. The marginal benefit might include the benefit from completing (part of) the report, the time saved due to multitasking, and the personal satisfaction from having an additional task started or completed. The marginal cost of working on the third task might include the cost of the extra effort to concentrate on an additional (third) task, the cost of increased risk of burnout, etc.**