

Lesson 14:

## Can You Be Fashionable and Ethical?

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In this economics lesson, students will explore the fashion industry, including production incentives and the resulting externalities.

## Description of the lesson

The lesson will provide students with a way to think about the fast fashion industry, its impact on pollution and waste, and challenge them to advocate for ways to help reduce these negative externalities. Students participate in an activity where they are "producing" blue jeans by cutting pieces of paper. The students will make business choices about production to simulate the decision of changing from more expensive, but longer lasting, fabric to cheaper fabric. Students will make decisions based on the information they are provided that could lead to more production and more revenue. These decisions could come at the cost of hurting the environment with their waste, a negative externality.

## Economics

All production decisions come at a cost-monetary cost, environmental cost, production cost, etc. Some of these costs are direct while others are indirect or they affect someone other than the person producing or consuming the good/service. These costs are called externalities. In the textile industry there are many negative externalities including pollution, cancer, and other environmental issues. Often these costs are not known at the time businesses make the decision or the incentives are such that an environmentally damaging choice might be made. As with all decisions, the marginal benefits and costs must be examined and a choice must be made that considers all costs - including negative externalities.

Teacher note: Externalities can be positive (spillover benefit) or negative (spillover cost). While the two are important to production and consumer decisions the focus on this lesson will be on negative externalities.

## Ethics

The market can encourage production without regard to any external costs on a third party. Ethical consideration should also be considered particularly if there are large environmental issues. However, much of the ethical discussion is who should be responsible for making decisions for the environment. Should it be the producers to alter their levels of production? Do the consumers and their purchasing habits have a role? Should the government step in to institute pollution regulations? Ethics is a vital part of considering how much to produce and in this case how many jeans should be produced.

## Objectives:

After completing this lesson students will be able to:

- evaluate potential business decisions including costs to third parties (negative externalities) that a company might create.
- identify and compute costs, revenue, and profit.
- critique business decisions based on the benefits and costs imposed - including any negative externalities.
- develop and support ways to reduce the impacts of potential negative externalities in the fashion industry.


## Standards

## Voluntary National Content Standards in Economics ${ }^{1}$

- Standard 2: Decision Making
- Effective decision making requires comparing the additional costs of alternatives with the additional benefits. Many choices involve doing a little more or a little less of something: few choices are "all or nothing" decisions
- Standard 4: Incentives
- People usually respond predictably to positive and negative incentives.
- Standard 16: Role of Government and Market Failure
- There is an economic role for government in a market economy whenever the benefits of a government policy outweigh its costs. Governments often provide for national defense, address environmental concerns, define and protect property rights, and attempt to make markets more competitive. Most government policies also have direct or indirect effects on peoples' incomes.


## Concepts

Decision Making/Cost-Benefit Analysis, Incentives, Externalities, Costs of Production

## Time Required

60 minutes

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## Materials Needed

- Slide presentation: Can You Be Fashionable and Ethical?
- Timer
- Copies of Activity 14:1: Costs of Production, one per group of 3-4 students
- Scissors, one per student
- Pencil or Pen, one per group of 3-4 students
- Copies of Activity 14.2: Blue Jeans made with high quality and durable fabric, $4-5$ half sheets per student (may need more or less depending on how quickly students can cut out the jeans)
- Copies of Activity 14.3: Blue Jeans made with average quality fabric, 4-5 sheets per student may need more or less depending on how quickly students can cut out the jeans
- (optional) small prize for the winning team like candy, extra credit points, etc.
- Trash can for clean up


## Preparation

Print Activity 14.2: Blue Jeans made with high quality and durable fabric and cut along the horizontal line so that each sheet is now 2 sets of jeans to cut out.
There is a video link on Slide 11 that the teacher should get ready to play in class prior to the game starting. Here is the Business Insider video: https://www.insider.com/polluted-yamuna-river-in-india-2021-11

## Procedure

1. Start the lesson by asking one or more of the following questions which are on slide 2 of the slide presentation, Can You Be Fashionable and Ethical?
a. How many pairs of jeans do you have? Answers may vary but include any number of pairs of jeans, for example, I have 4 pairs of jeans.
b. What brands of jeans do you know of? Answers may vary but include common brands, luxury brands, etc. Teachers might want to do a quick Google search on current popular brands.
c. What is your favorite brand of jeans? Answers may vary but include name brand, store brand, thrifted brands, etc.
Teacher note: The goal of this is not to shame students based on how many pairs they do or do not have or what type of jeans they own, it's to get them to think about the fact that there are lots of jeans out there in the world.
2. Tell the students that many people view jeans as wardrobe essentials. You all might know a lot about buying jeans, but let's examine the production side of jeans and how you all might be affected more than you think by the jeans you buy.
3. Have students get into groups of 3-4 around a common table or area. If possible, have each group around their own table which represents their own building and land space. Explain to students that today they are going to produce blue jeans and display slide 3 with instructions. Hand out one copy of Activity 14:1: Costs of Production to each of the groups. Make sure each group has at least one pencil or pen to keep track of their production. Tell the class that their goal is to make as much profit as possible! You may even offer a small but desirable prize to the company that makes the most profit at the end of the activity.
4. Hand out one copy of Activity 14.2: Blue Jeans Made with High-Quality and Durable Fabric to each student. Provide scissors for each member of the group to use. Display slide 4 to the students.
5. Tell the students that it takes about 1.5-2 yards of fabric to make each pair of jeans. The half sheet of paper is a bolt of denim (Teacher note: if needed explain that a bolt is a measurement unit of finished fabric). Each bolt (or half-sheet of paper) they have is about 5 yards of high quality and durable denim and can make 3 pairs of jeans. To make jeans they are going to carefully cut out the shapes in Activity 14.2: Blue Jeans Made with High-Quality and Durable Fabric. Each pair of jeans the students cut out can be sold for $\$ 100$ ! Students will have 3 minutes to carefully cut out as many jeans as possible. Students can have 1 sheet of paper at a time but they can get more bolts of denim by getting one more half-sheet of paper from you (the teacher). Additionally, they must cut extremely carefully as only perfectly cut jeans can be sold in a store to make any revenue. Any jeans that are not cut well (Teacher is the final judge) will be put with the rest of the scrapped paper.
Teacher note: 1) It might be worth pulling a few "unacceptable" cuts from each group during the 3 minute production process to encourage students to cut carefully. They must discard these jeans and cannot sell them. 2) Do not let students throw away the scraps they cut off (or the "unacceptably" cut jeans). These are going to start posing a negative externality and in later rounds; you will need them to clean it up and pay to take care of the environment.
6. Set the timer for 3 minutes and begin round 1. At the end of the round, students will make note of their costs, revenue (for simplicity assume everything they produce is sold-you can loosen this assumption later and talk about implications), and profit. The groups of students will keep track of how many bolts of denim they use on Activity 14:1: Costs of Production.
7. Define costs of production for the students as the amount producers pay for the resources used to produce a product. In this case each bolt of fabric costs the company $\$ 80$ each. Have students count up the number of bolts of fabric they used that round, multiply that number by $\$ 80$ to get their total cost and add it to Activity 14:1: Costs of Production. Use slide 5 for procedures 7-9 Teacher note: If a student only cuts out part of a sheet they still need to be charged the entire amount for the sheet of denim but can only count the jeans they cut out for revenue. It is then your choice if you have them discard the rest of the sheet or allow them to use the remaining amount to cut for the next round (note they already will have paid the cost of the fabric).Either policy about unused portions of the denim is appropriate and works for the activity. Stay consistent throughout all rounds with your policy.
8. Next define revenue as the money received or income of the company. To find out revenue count the number of jeans that were cut correctly and multiply that by the price of the jeans, $\$ 100$. That number is the total revenue for the company that round and add it to Activity 14:1: Costs of Production.
9. Finally, define profit as the amount of revenue that remains after a business pays the costs of producing a good or service. It can also be calculated by subtracting costs of production from the revenue. Have students calculate their profit for round 1 and add it to Activity 14:1: Costs of Production.
10. Display slide 6. You can use Activity 14:1: Costs of Production (example) if needed to help with calculations.
11. Have students share out their profits and get really excited about how much money they are making.
12. Point out that there's a bit of a mess. Do not make too big of a deal, just simply state that they should leave it off to the side of their area. It needs to stay on their work station/desk.
13. In the next round, tell students that there is this new denim that is much cheaper and makes average quality jeans for people. Display slide 7. The jeans sell for a little less than $\$ 60$ and the 20-yard bolt sheet costs $\$ 100$. But with each bolt you can make 12 pairs of jeans! Let each group of students act as a company to decide which type of fabric they are going to use. Let students know that once they make a decision they need to stick with that type of fabric for the round. Provide a copy of Activity 14.3: Blue Jeans made with average quality fabric for each member of the group that chooses this fabric. Provide a copy of Activity 14.2: Blue Jeans made with high quality and durable fabric for each member of the group that chooses this fabric.
14. Tell the students they will have 3 minutes to produce jeans. Remind students they can get more bolts of denim by getting one more half-sheet of the denim they chose for the round from you (the teacher). Point out that they must still cut extremely carefully as only perfectly cut jeans can be sold in a store and make any revenue. Start the timer for 3 minutes and begin round 2.
15. At the end of the round, students make note of their costs, revenue, and profit in the round 2 column, as they did after round 1. Display slide 8 to help with calculations if needed. You can use Activity 14:1: Costs of Production (example) if needed to help with calculations.

Teacher note (same as the previous round): 1) It might be worth pulling a few "unacceptable" cuts from each group to encourage students to cut carefully. They must discard these jeans and cannot sell them. 2) Do not let students throw away the scraps they cut off (or "unacceptably" cut jeans). These are going to start posing a negative externality and in later rounds you will need them to clean it up and pay to take care of the environment.
16. Have students share out their profits and get really excited about how much money they are making. Continue to have students keep the trash on their work stations-they may move it off to the side but you want their workstation to get quite messy.
17. Start round 3 by asking students to make a decision about what type of blue jeans they are going to make and the type of denim they are going to use. Hand out the paper with their denim choice and if needed, remind them of the rules and then start the timer for 3 minutes and begin round 3.
18. At the end of the round, students make note of their costs, revenue, and profit in the round 3 column as they did after round 1. Display slide 9 to help students with calculations if needed.
19. Have students share out their total profits and get really excited about how much money they are making. If you are going to award a prize be sure to announce that the most profitable company is going to get the prize! As with the previous round, continue to have students keep the trash on their work stations-they may move it off to the side but you want their workstation to get quite messy.
20. Pause and share the following information with the students which is also on slide 10.
a. "It takes about 700 gallons of water to produce a shirt and about 2,000 gallons to produce a pair of jeans!" ${ }^{2}$.
b. "The world consumes around 80 billion new pieces of clothing every year, $400 \%$ more than the consumption twenty years ago." ${ }^{3}$
c. "Every year a half a million tons of plastic microfibers are dumped into the ocean, the equivalent of 50 billion plastic bottles [from clothing and textiles]."4
d. "Around $20 \%$ of wastewater worldwide comes from fabric dyeing and treatment." ${ }^{5}$
e. "Less than 1\% of used clothing is recycled into new garments. The Ellen MacArthur Foundation estimates that every year some USD 500 billion in value is lost due to clothing that is barely worn, not donated, recycled, or ends up in a landfill." ${ }^{6}$
21. Show them the video, "People are bathing in the heavily polluted Yamuna River in India" ${ }^{7}$ from Business Insider. The video is about 1 minute 16 seconds long and a link to the video is on slide 11.

[^1]22. After the video, make a huge deal about all of the trash and pollution that the groups made. Exclaim that this trash is polluting the soil, water, etc. It is causing massive damage to the environment and especially to the people in the community who are using the same water supply or for farmers in the area having their ground water being contaminated. It's making people sick, causing cancer, and all-around hurting humans and animals.
23. Ask students what the economic term is when there is a cost or burden on a third-party or a person who is not the direct buyer or seller of the jeans? Answer: Negative Externality. The definition is on slide 12.
Teacher note: If you have not covered negative externalities then explain and define a negative externality rather than have them answer the question. A negative externality exists when the production or consumption of a product results in a cost to a third party.
24. Tell them it's time to clean up all the environmental damage, trash, and pollution they have created. Display slide 13.
25. First, tell students to count the number of 5-bolts of high-quality denim they used. For each bolt of high-quality denim they used, charge them $\$ 100$ to clean up the trash.
26. Explain that the trash from the average-quality denim is much harder and more costly to clean up. It is costly to clean up polluted water, or to fix the land around their firms. To clean up all the rest of the scraps of paper they are going to have to pay $\$ 300$ per bolt of average quality denim (20-yard bolts) they used to throw away the trash. If groups of students refuse to pay this because it is going to cut into their profits then explain that you will have to shut down their business altogether and they will be unable to make any profits.
27. Have students update their costs of production sheets to see how much profit they made after all the environmental clean-up was done. For simplicity, have students write in the additional costs they incurred at the bottom of the sheet and subtract that from the total profit in round 3. Have groups of students report out their profit prior to the negative externality (trash) and after paying for the negative externality. Students might be quite mad about their lost profits. If you are awarding a prize give the prize to the most profitable team AFTER all the costs have been accounted for.
28. Debrief the lesson by asking the following questions to the students which is also on slide 14:
a. Why did you switch denims (many of them likely did at some point in the different rounds)? Answers may vary but include: they could make more profit, the material was cheaper, and you could get more jeans out of the bolt. Then continue this discussion by reminding students that people respond to incentives in predictable ways and that an incentive is a reward or punishment used to encourage or discourage a certain behavior. You all were responding to the incentive of more profit as expected and as many companies have done.
b. If we were to play another round, what type of denim would you likely choose? Answers may vary but include: the high-quality denim because even though they didn't make as much revenue as with the average quality denim they didn't have the high cost of cleaning up the environment so their profits were higher in the long run. Some groups might also choose the high-quality denim because they now understand the full environmental costs of their decisions and value the environment more than the higher profits with the average quality denim.
c. At the end of the activity, all groups or companies had to pay a large amount of money to clean up the environment. In economics we call this internalizing the cost of the negative externality ${ }^{8}$. Paying a tax or money is one way for a company to internalize the cost; can you think of other ways the company could internalize the cost of producing the jeans? Answers may vary but include: companies could change their production methods where they do not emit the same amount of pollution. Companies might have to stop producing as much product. They might also have to find a new way to handle their waste besides throwing it into a local river/stream. Students might want to raise the price of their jeans to pass the costs on to the consumer. This would be a good time to review the effects of a price increase on quantity demanded.
Teacher note: you could talk to them about the new technology from a Denim company Italdenim that has changed the way jeans are created (http://www.italdenim.it/en/). This is also discussed at the end of the documentary, RiverBlue, which you can find in the Extension section.
29. Explain to students that in economics, decisions are made marginally, that is we compare marginal benefits against marginal costs (definitions on slide 15). Explain and define that marginal benefits are the benefits of consuming the next item, in this case the benefit someone would have from buying the next pair of jeans. Marginal costs are the production costs of producing the next item, which is producing one more pair of jeans.
30. Ask students the following questions which are on slides 16 and 17:
a. For the last several decades companies have been responding to the market and consumers wanting more clothing and cheaper clothing, which has given rise to fast fashion. Define fast fashion for the students as "cheaply produced and priced garments that copy the latest catwalk styles and get pumped quickly through stores in order to

[^2]maximize on current trends." Besides responding to the market, what ethical considerations should the fashion industry take into account when making decisions about their production? Answers may vary but include: environmental issues, polluting lakes, streams, etc., how long-term these environmental issues can last, labor concerns including child labor or poor working conditions, consequences or treatment of animals in some cases.
b. One of the consequences of fast fashion is that the clothes can be more disposable. They are often not as high quality and therefore they get thrown away more quickly by consumers. From an economic standpoint this decision including both costs and benefits falls on the consumer. From an ethical standpoint this could be a cost that a producer must take on. Should consumers or producers have to take into consideration the waste of the clothing? Answers may vary but include: consumers because they have to choose what they do and businesses cannot force them to keep the clothing regardless of fit or style changes. Other students might think producers should take on some of the burden because if they are making clothes that cannot last, then part of that could be their fault. There may also be students who feel that the government or some governing body should come in and make regulations in the fashion industry.
c. How did our simulation address the problem of negative externalities? Answer: Negative externalities result from a company not taking responsibility for all the costs associated with production. These costs are not reflected in the price of the product, making it cheaper. More people buy at the cheaper price so more is produced. By imposing the costs of clean-up, the company makes less profit and is forced to alter the way the jeans are produced or raise the price.

## Closure

31. Have students watch the following YouTube video, "The True Cost of Fast Fashion" by The Economist ( $6: 50 \mathrm{~min}$ ) which is also on slide 18. This video talks about donated clothes mostly ending up in a landfill and provides a few examples of ways companies are eliminating their environmental impact and textile waste.
32. Remind students that consumers and producers are making decisions based on the information that they have. In most cases when we buy something or a producer sells something they are the only two parties that are involved. But sometimes, like in the case with fashion, there is pollution or other negative externalities and so other people who are not buying or selling the clothes can be harmed. Therefore, it's part of an economist's job to think about not only the people directly involved but also those who are indirectly involved to make decisions.
[^3]
## Assessment

33. Distribute Assessment 14: Fast Fashion and the Environment or show slide 19. It is unlikely that the world is going to halt all production of jeans, but using your economic analysis and marginal decision-making (that is comparing marginal costs and marginal benefits) create an infographic that could be printed and put around the school to help raise awareness about this issue with some reasonable solutions that your peers could take to help the environment related to fast fashion. Keep in mind that almost all donated clothes end up being in a landfill or incinerated so their solutions cannot simply be to donate their clothes. ${ }^{10}$
Resource for students: https://venngage.com/blog/how-to-make-an-infographic-in-5-steps/

Some sample assessment items:

1. Companies may earn a profit by creating a product that consumers want. This profit is an example of $a(n)$
a. marginal decision.
b. incentive.
c. opportunity cost.
d. production choice.
2. Which of the following is an example of a negative externality in the textile industry?
a. The money the company spends on labor.
b. The money a person spends buying a pair of jeans.
c. The pollution in the water that muddies the banks of a town 5 miles down the river.
d. The clean-up costs that a company must take on in order to keep the water clean.
3. A company that is considering a brand-new technology to make denim is looking at the cost of the machine, how many pairs of jeans the machine can produce, and some of the long-term environmental impacts of the machine. This company is
a. using ethics as the only way to consider the choices.
b. looking at how the market responds to their decisions.
c. internalizing the benefit of producing jeans.
d. using ethics as part of their marginal decision.

Essay:
How can you use the economic ideas of incentives, marginal decision-making, and ethics to make consumption decisions for other items around your house (e.g. furniture, single-use plastic, toys, electronics, etc.). Pick 2-3 items around your house for your answer. Answers may vary but include: thinking about how long-term the item is, maybe buying used items, not purchasing something because they might not really need it and can make do with something else.

[^4]
## Extension

- Watch RiverBlue, co-directed by award-winning documentarians David Mcllvride and Roger Williams and produced by Lisa Mazzotta (1 hr. 35 min ). Watch for no monetary cost with your public library card on Kanopy.com. About RiverBlue:
"Following international river conservationist, Mark Angelo, RIVERBLUE spans the globe to infiltrate one of the world's most pollutive industries, fashion. Narrated by clean water supporter Jason Priestley, this groundbreaking documentary examines the destruction of our rivers, its effect on humanity, and the solutions that inspire hope for a sustainable future. Through harsh chemical manufacturing processes and the irresponsible disposal of toxic chemical waste, one of our favorite iconic products has destroyed rivers and impacted the lives of people who count on these waterways for their survival. RIVERBLUE brings awareness to the destruction of some of the world's most vital rivers through the manufacturing of our clothing but will also act as a demand for significant change in the textile industry from the top fashion brands that can make a difference." ${ }^{11}$
- Watch this video that discusses how Rothys is using sustainable practices to produce shoes. https://www.youtube.com/watch?v=vwFqotLdti4
- What issues do you see Rothys trying to address?
o Do you know of other companies trying to address similar issues?
- Read "The Myth of Sustainable Fashion" https://hbr.org/2022/01/the-myth-of-sustainablefashion. Apply the action items addressed in this article to the production activity that you just completed in class.
- Continue the discussion of the fashion industry by looking at the ethical considerations of labor practices using the lesson, "Should I Join the Sweatshop Boycott?". ${ }^{12}$

Have a general discussion of the role of ethics in businesses, using the lesson, "Do Businesses Have Social Responsibility?" ${ }^{13}$

[^5]
## References

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## Activity 14.1: Costs of Production

Use this to keep track of your business costs and revenue for each round.

|  | Round 1 | Round 2 | Round 3 |  |
| :--- | :--- | :--- | :--- | :---: |
| Costs of Production-The amount producers pay for the resources used to produce a <br> product. |  |  |  |  |
| Number of 5-yd bolts |  |  |  |  |
| Cost of 5-yd bolt |  |  |  |  |
| Number of 20-yd <br> bolts |  |  |  |  |
| Cost of 20-yd bolt |  |  |  |  |
| Total costs |  |  |  |  |
| Revenue-the money received or income of the company |  |  |  |  |
| Price of each jean <br> produced |  |  |  |  |
| Number of jeans <br> produced |  |  |  |  |
| Total Revenue |  |  |  |  |
| Profit = Total Revenue - Total Costs | Round 1 Profit: |  | Rounds 1 + 2 + 3 <br> Total Profit <br> (Add up profit from <br> each round) |  |

## Activity 14.1: Costs of Production (example for teacher use)

Use this to keep track of your business costs and revenue for each round.

|  | Round 1 | Round 2 | Round 3 |
| :---: | :---: | :---: | :---: |
| Costs |  |  |  |
| Number of 5-yd bolts | 5 | - | - |
| Cost of 5-yd bolt | \$80 | - | - |
| Number of 20-yd bolts | - | 3 | 5 |
| Cost of 20-yd bolt | - | \$100 | \$100 |
| Total costs | $5 \times \$ 80=\$ 400$ | $\begin{gathered} 3 \times \$ 100= \\ \$ 300 \end{gathered}$ | $\begin{gathered} 5 \times \$ 100= \\ \$ 500 \end{gathered}$ |
| Revenue |  |  |  |
| Number of jeans produced | 13 | 28 | 35 |
| Price of each jean produced | \$100 | \$60 | \$60 |
| Total Revenue | $\begin{gathered} 13 \times \$ 100= \\ \$ 1300 \end{gathered}$ | $\begin{gathered} 28 \times \$ 60= \\ \$ 1680 \end{gathered}$ | $\begin{array}{r} 35 \times \$ 60= \\ \$ 2100 \end{array}$ |
| Profit $=$ <br> Total Rev-Total <br> Costs | $\begin{gathered} \$ 1300-\$ 400= \\ \$ 900 \end{gathered}$ | $\begin{gathered} \$ 1680-\$ 300= \\ \$ 1380 \end{gathered}$ | $\begin{gathered} \$ 2100-\$ 500= \\ \$ 1600 \end{gathered}$ |
|  | Round 1 Profit: | Rounds 1 + 2 Profit: | Rounds 1 + 2 + 3 Profit: |
| Total Profit (Add up profit from each round) | \$900 | $\begin{gathered} \$ 900+\$ 1380= \\ \$ 2280 \end{gathered}$ | $\begin{gathered} \$ 2280+\$ 1600= \\ \$ 3880 \end{gathered}$ |

## Activity 14.2: Blue Jeans made with high-quality and durable fabric

This 5-yard Bolt of Denim cost $\$ 80$. Jeans sell for $\$ 100$ each.


## Activity 14.2: Blue Jeans made with high-quality and durable fabric

 This 5 -yard Bolt of Denim cost $\$ 80$. Jeans sell for $\$ 100$ each.

## Activity 14.3: Blue Jeans made with average-quality fabric

This 20-yard bolt of denim cost $\$ 100$. Jeans sell for $\$ 60$ each.


EconEdLink

## Assessment 14: Fast Fashion and the Environment

It is unlikely that the world is going to halt all production of jeans, but using your economic analysis and marginal decision-making (that is comparing marginal costs and marginal benefits) create an infographic that could be printed and put around the school to help raise awareness about this issue with some reasonable solutions that your peers could take to help the environment related to fast fashion.

Keep in mind that almost all donated clothes end up being in a landfill or incinerated so your solution cannot simply be to donate their clothes.

## Assessment 14

Some sample assessment items:

1. Companies may earn a profit by creating a product that consumers want. This profit is an example of a(n)
a. marginal decision.
b. incentive.
c. opportunity cost.
d. production choice.
2. Which of the following is an example of a negative externality in the textile industry?
a. The money the company spends on labor.
b. The money a person spends buying a pair of jeans.
c. The pollution in the water that muddies the banks of a town 5 miles down the river.
d. The clean-up costs that a company must take on in order to keep the water clean.
3. A company that is considering a brand new technology to make denim is looking at the cost of the machine, how many pairs of jeans the machine can produce, and some of the long-term environmental impacts of the machine. This company is
a. using ethics as the only way to consider the choices.
b. looking at how the market responds to their decisions.
c. internalizing the benefit of producing jeans.
d. using ethics as part of their marginal decision.

Essay:
How can you use the economic ideas of incentives, marginal decision-making, and ethics to make other consumption decisions for other items around your house (e.g. furniture, single-use plastic, toys, electronics, etc.). Pick 2-3 items around your house for your answer.


[^0]:    ${ }^{1}$ Voluntary National Content Standards in Economics: https://www.councilforeconed.org/wp-content/uploads/2012/03/voluntary-national-content-standards-2010.pdf

[^1]:    ${ }^{2}$ https://earth.org/fast-fashions-detrimental-effect-on-the-environment/
    ${ }^{3}$ https://earth.org/fast-fashions-detrimental-effect-on-the-environment/
    ${ }^{4}$ https://www.worldbank.org/en/news/feature/2019/09/23/costo-moda-medio-ambiente
    ${ }^{5}$ https://www.worldbank.org/en/news/feature/2019/09/23/costo-moda-medio-ambiente
    ${ }^{6}$ https://www.worldbank.org/en/news/feature/2019/09/23/costo-moda-medio-ambiente
    ${ }^{7}$ Business Insider, People are bathing in the heavily polluted Yamuna River in India:
    https://www.insider.com/polluted-yamuna-river-in-india-2021-11

[^2]:    ${ }^{8}$ As an extension talk to students in more advanced economics classes about Pigouvian taxes both the benefits and limitations. See more in the Extension section of this lesson.

[^3]:    ${ }^{9}$ The Economist, True cost of fast fashion https://www.youtube.com/watch?v=tLfNUD0-8ts

[^4]:    ${ }^{10}$ https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/textiles-material-specificdata

[^5]:    ${ }^{11} \mathrm{https}: / /$ riverbluethemovie.eco/
    12 Lesson "Should I Join the Sweatshop Boycott?" https://econedlink.org/resources/should-i-join-the-sweatshop-boycott/
    ${ }^{13}$ Lesson "Do Businesses Have Social Responsibility?" https://econedlink.org/resources/do-businesses-have-social-responsibility/

