## Absolute vs. Comparative Advantage

Absolute advantage is the ability to produce more of a good or service than competitors when using the same amount of resources.

Example: Coke vs. Pepsi, who can produce the most beverages using the same amount of resources?

Example: Papa John's vs. Domino's Pizza, who can produce the most pizzas using the same amount of resources?

Comparative advantage is the ability of an individual, firm, or country to produce a good or service at a lower opportunity cost than competitors.

Recall that opportunity costs are the highest valued alternative that must be given up to engage in an activity.

Example: Florida has a comparative advantage over Michigan in growing oranges.
Example: China has a comparative advantage over the U.S. in rice production.
Comparative advantage explains why people pursue different occupations and why countries produce different goods and services.

Countries are better off if they specialize in producing the goods and services for which they have a comparative advantage.

They can trade for the goods for which countries have a comparative advantage.

Example: Japanese and U.S. workers both producing cell phones and MP3 players

## Output per hour of work

Cell Phone Production per hour

## Japan 12

U.S.

2

Which worker can produce the most cell phones per hour? Japanese
Which worker can produce the most MP3 players per hour? Japanese
Which country has the absolute advantage in producing each good? Japan
Who has the comparative advantage in producing each good? It depends on the opportunity cost associated in producing both goods.

## Opportunity Costs

## Japan

Japan has to give up 12 cell phones for every 6 MP3 players it produces.
So the opportunity cost to Japan of producing one more MP3 player is $12 / 6$, or 2 cell phones.

Japan has to give up 6 MP3 players for every 12 cell phones it produces.
So the opportunity cost to Japan of producing one more cell phone is $6 / 12$, or 0.5 MP3 players.

## U.S.

The U.S. has to give up 2 cell phones for every 4 MP3 players it produces.
So the opportunity cost to the U.S. of producing one more MP3 player is 2/4, or 0.5 cell phones.

The U.S. has to give up 4 MP3 players for every 2 cell phones that it produces.
So the opportunity cost to the U.S. of producing one more cell phone is $4 / 2$, or 2 MP3 players.

## Opportunity Costs

Cell Phones MP3 players
Japan 0.5 MP3s 2 cell phones
U.S. 2 MP3s 0.5 cell phones
Conclusion:
We can see that Japan has the lower opportunity costs in producing cell phonesand therefore has the comparative advantage in making this product.

We can see that the U.S. has the lower opportunity cost of producing MP3 players and therefore has a comparative advantage in making this product.

