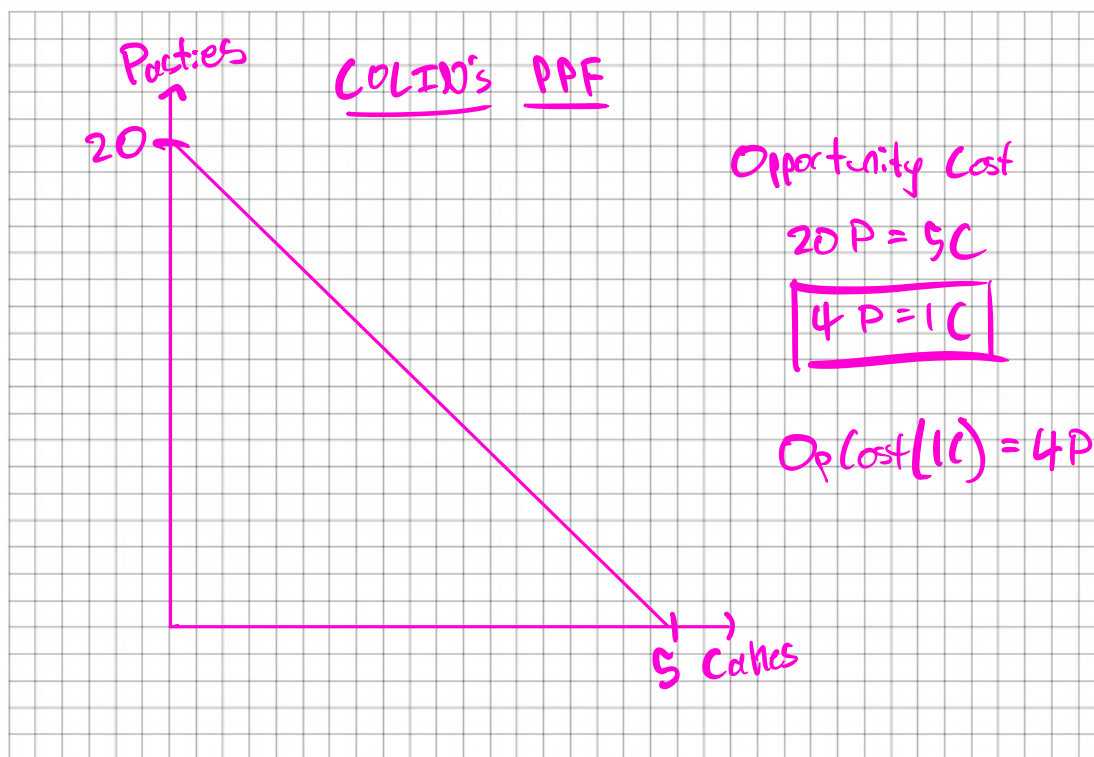


## Econ 101 | Demo A

Demos are similar to MiniExams, often taken directly from past semesters. The goal is to both test your knowledge and provide a venue for practice. Work through the problems and check your work against mine. Send me questions at [tweidman@richmond.edu](mailto:tweidman@richmond.edu). Practice answering clearly and completely. Show your work so someone else can understand your thought process. You are encouraged to work in small groups. Find a study room, grab some classmakes, and work together on a whiteboard.

### Q1 | Colin's PPF

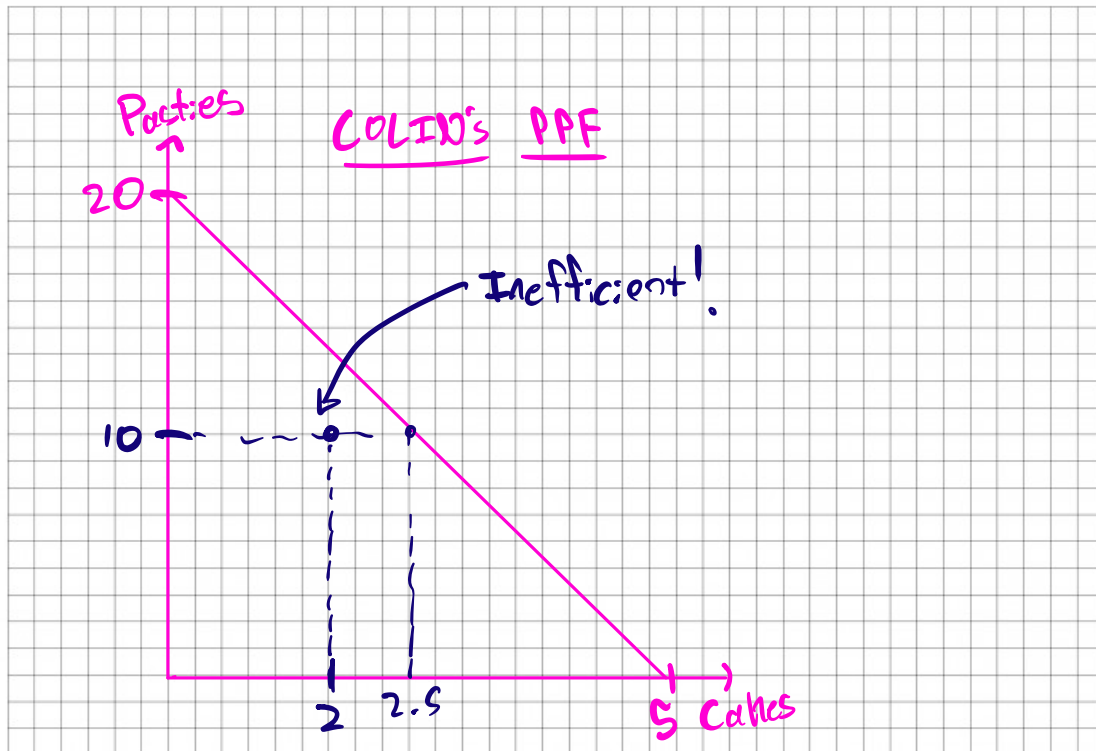
Colin Creevey can bake 20 cornish pasties or 5 cauldron cakes in one day. Set up Colin's PPF on an  $x,y$  graph with pasties on the vertical and cakes on the horizontal. What is Colin's opportunity cost of producing 1 cake?



Opportunity cost of cakes: 4P

## Q2 | Efficiency

Suppose Colin bakes 10 pasties and 2 cakes in one day. Is this inefficient, efficient, or unattainable. Use a graph or algebra to justify your answer.



Inefficient, Efficient, or Feasible: Inefficient

### Q3 | Absolute and Comparative Advantage

Katie Bell also bakes cornish pasties and cauldron cakes at a neighboring bakery. She can bake 15 pasties or 8 cakes in one day. Set up a production table with both Colin and Katie's output per day. Who has the absolute advantage (AA) in pasties? Then set up an opportunity cost table with Colin and Katie's opportunity costs for each good. Who has the comparative advantage (CA) in pasties?

| PRODUCTION TABLE |    |   | OP COST TABLE |                 |                 |
|------------------|----|---|---------------|-----------------|-----------------|
|                  | P  | C |               | P               | C               |
| Colin            | 20 | 4 | Colin         | $\frac{1}{4}C$  | 4P              |
| Katie            | 15 | 8 | Katie         | $\frac{8}{15}C$ | $\frac{15}{8}P$ |

Absolute Advantage

$15P = 8C$   
 $P = \frac{8}{15}C$   
 $\frac{15}{8}P = C$

Comparative Advantage

AA in Pasties: Colin

CA in Pasties: Colin

## Q4 | An Improving Trade

Suppose Colin and Katie realize they can specialize and trade goods. After they specialize, what is a trade that would make them both better off?

OP COST TABLE

|       | P               | C               |
|-------|-----------------|-----------------|
| Colin | $\frac{1}{4}C$  | 4P              |
| Katie | $\frac{8}{15}C$ | $\frac{15}{8}P$ |

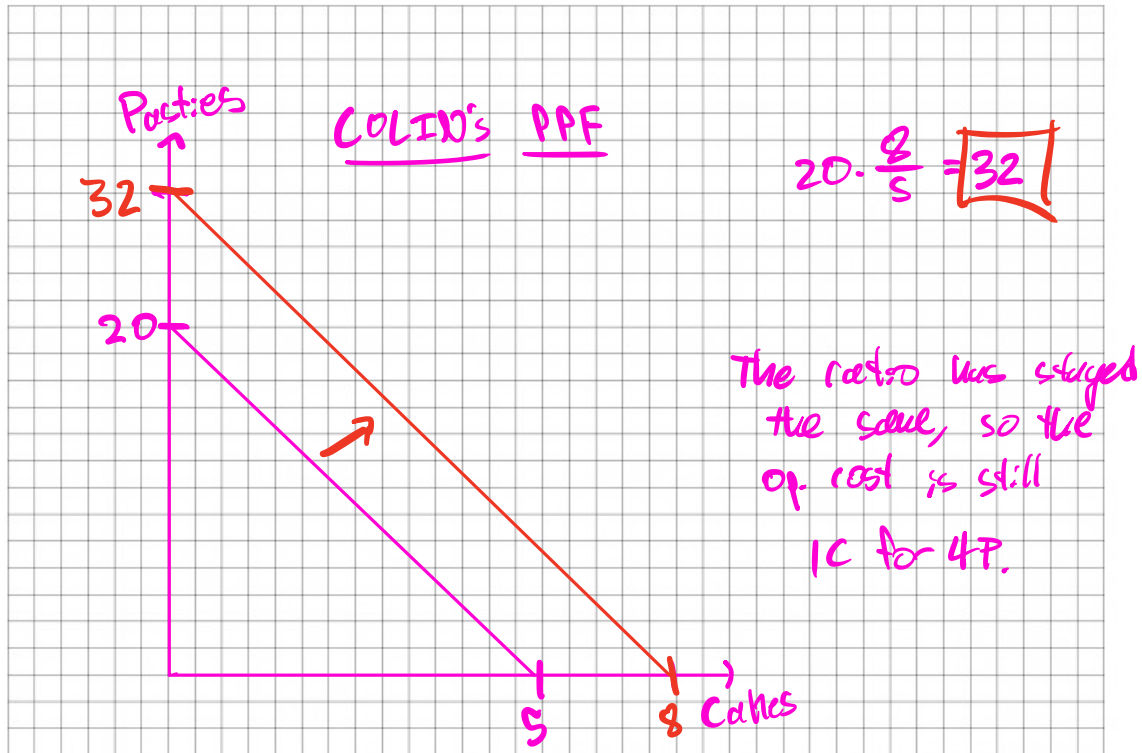
We need a trade between  $\frac{1}{4}C$  and  $\frac{8}{15}C$   
 $\rightarrow 1P$  for  $\frac{1}{2}C$

Colin and Katie can specialize in their comparative advantaged goods and trade  $1P$  for  $\frac{1}{2}C$  and both do better.

1 Pasties for  $\frac{1}{2}$  Cakes

## Q5 | Changing Labor

It turns out Colin wants to add hours to his job. So he increases from 5 to 8 hours per day. Set up Colin's old and new PPF on the same graph. What is Colin's new opportunity cost of cake?



New Opportunity Cost of Cake: 4P