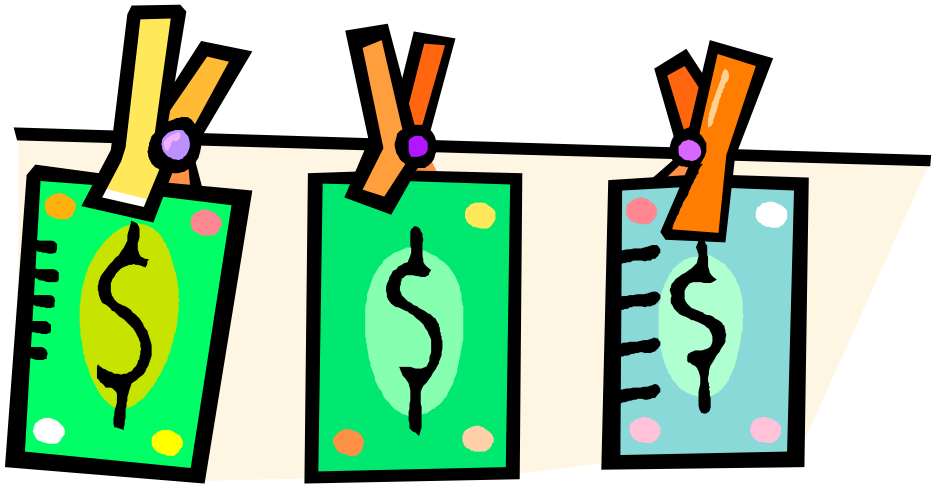
The Production Possibilities Frontier



Introduction

- The Production Possibilities Frontier (PPF) is a graph that shows all possible combinations of two goods when an economy is producing at full potential.
  - It does not actually show reality, since it assumes only two goods are produced.
  - It is a simplification that shows what sort of trade-offs would be made in reality.
  - It only shows what can be produced – not what would be consumed.

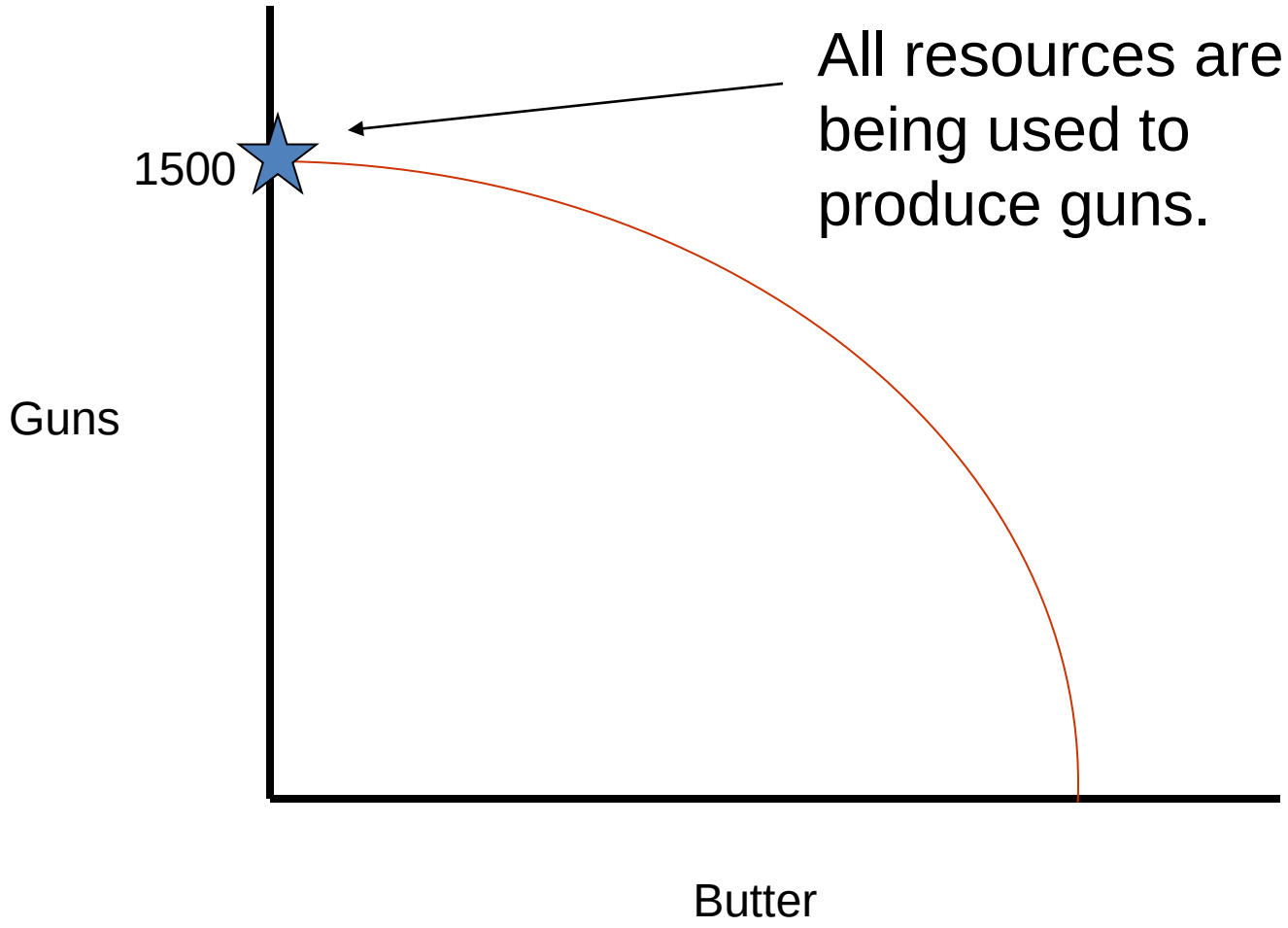
Examples of Two Goods

- Capital Goods- manufactured goods used to produce other goods and services
  - GUNS(Military spending)
- Consumer Goods- intended for final use by individuals

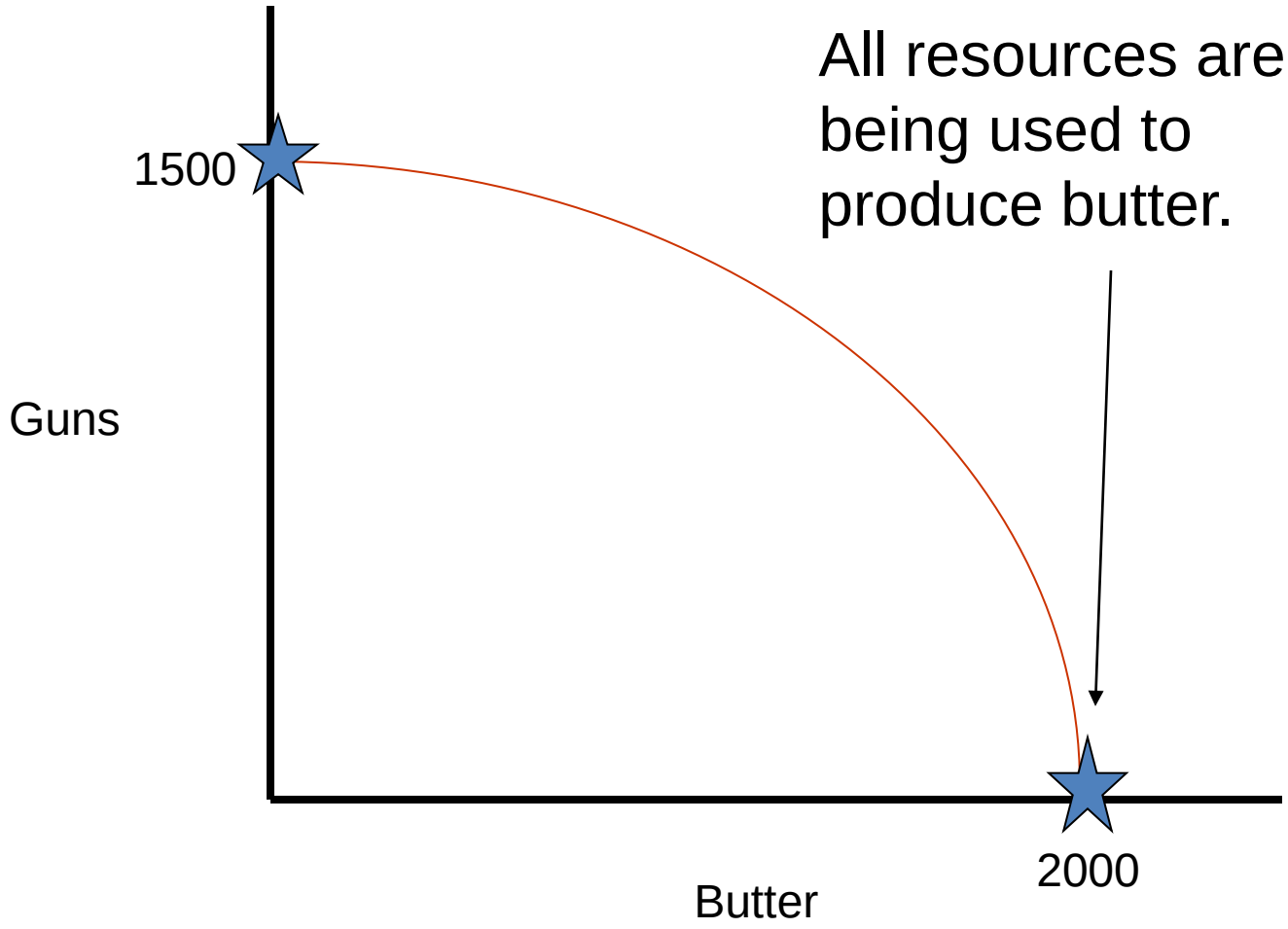
  BUTTER (food)

  Example: A nation might produce more guns during war time and reduce production of food).

PPF for the Country ALPHA

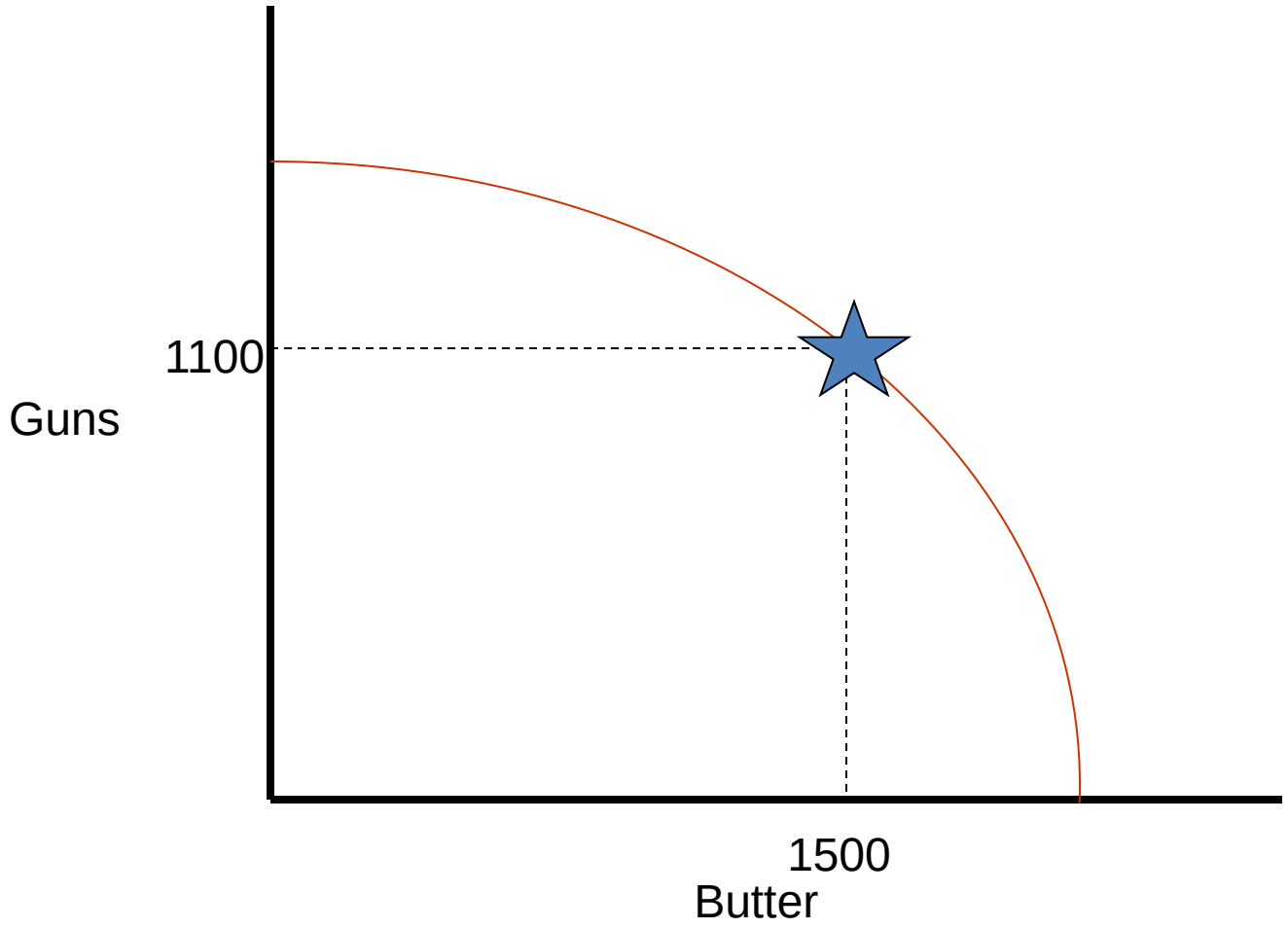


PPF for the Country ALPHA



Usually a point is chosen where both items are being produced:

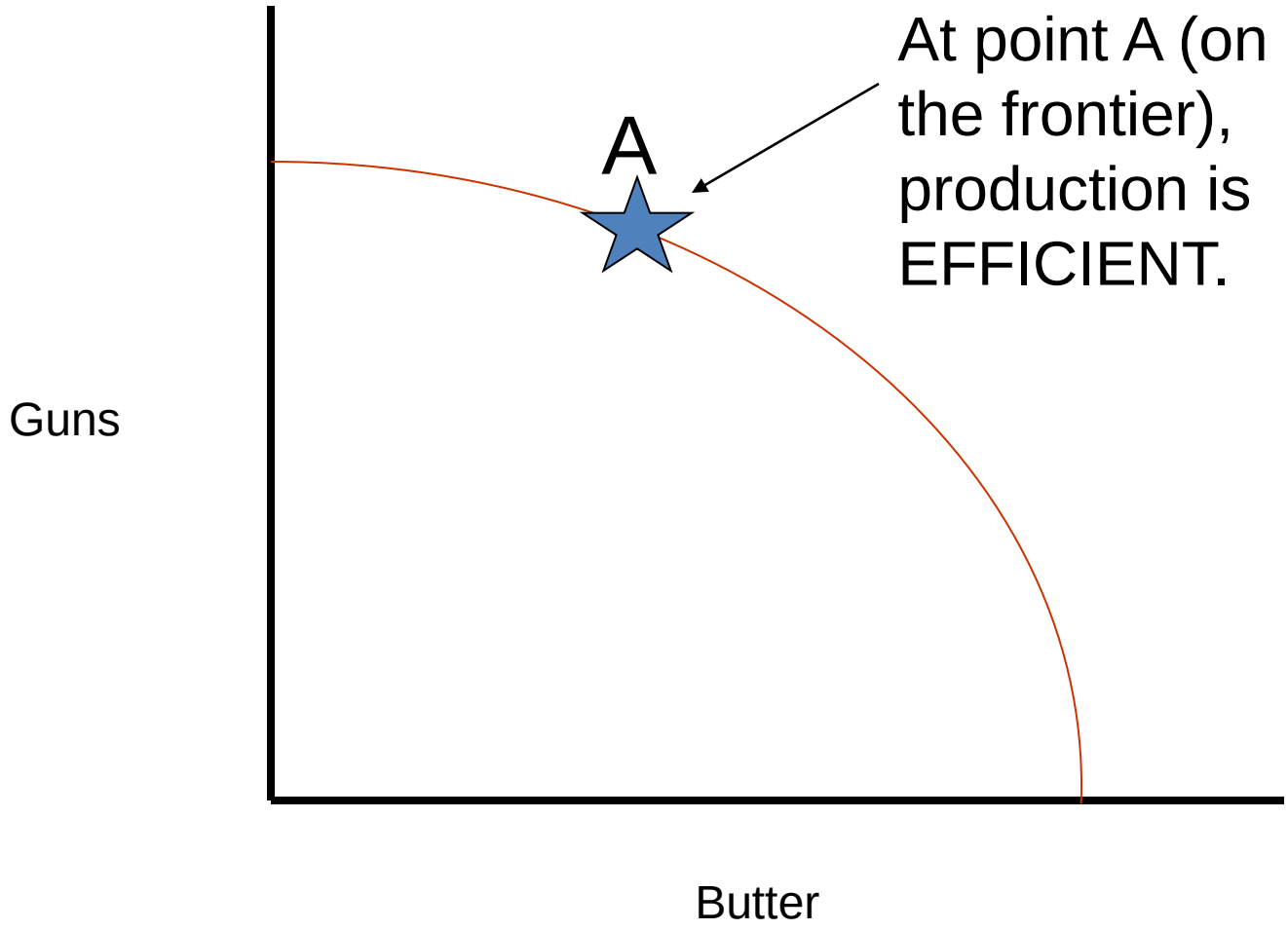
PPF for the Country ALPHA



Production may occur anywhere on or within the frontier.

It may NOT occur beyond the frontier– there are not enough resources to do so.

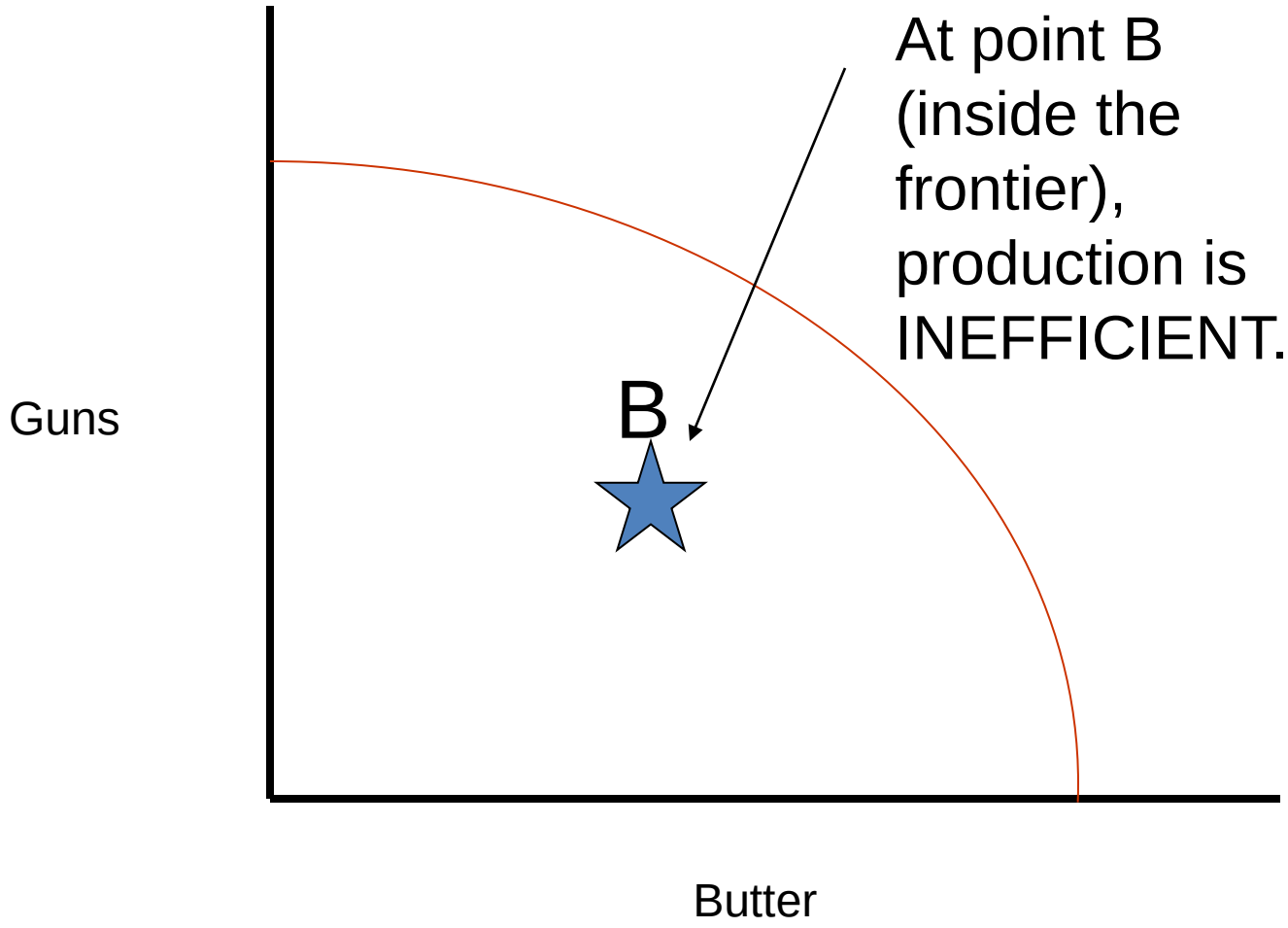
PPF for the Country ALPHA



Efficient production means that all resources are being fully employed to produce the most goods and services possible.

Therefore it is impossible to produce more of one item without producing less of the other.

PPF for the Country ALPHA



Inefficient production means not all resources are being fully employed – it is still possible to increase production of both goods.

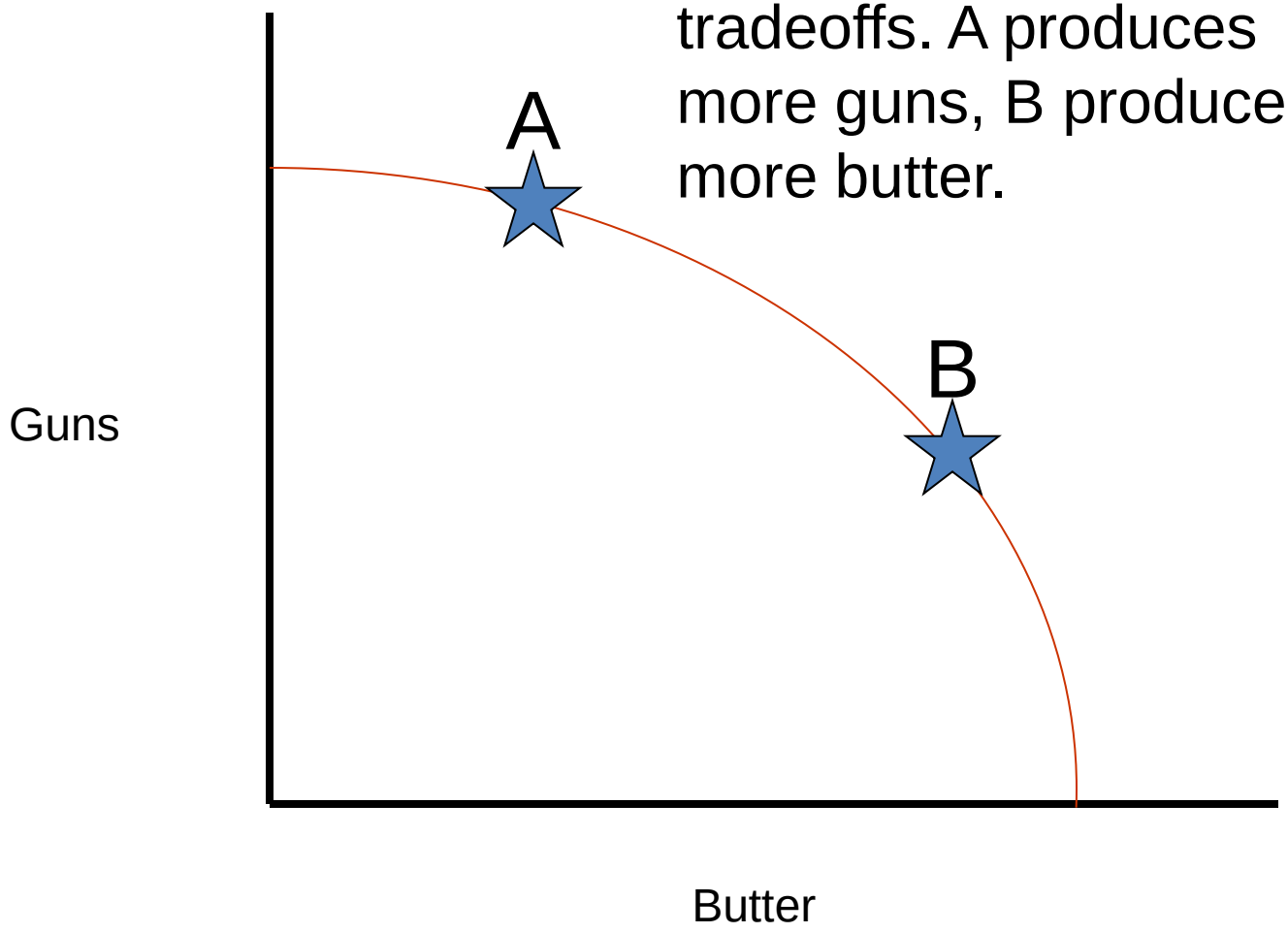
This could occur during a recession or depression, or in a developing country.

The PPF can be used to show tradeoffs.

Any two or more points on the frontier represent tradeoffs.

PPF for the Country ALPHA

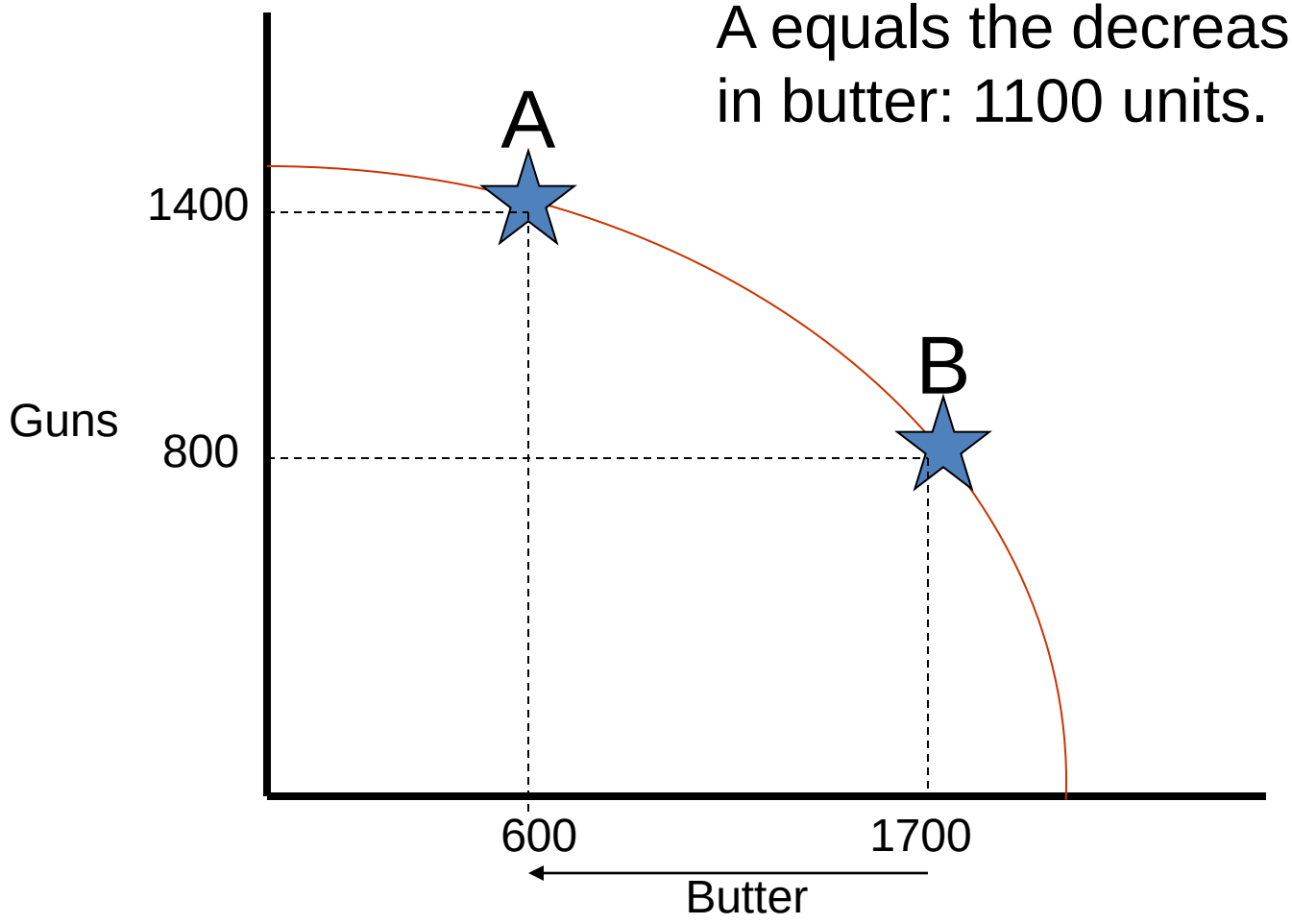
A and B represent tradeoffs. A produces more guns, B produces more butter.



The PPF can be used to show the opportunity cost of choosing one alternative over the other.

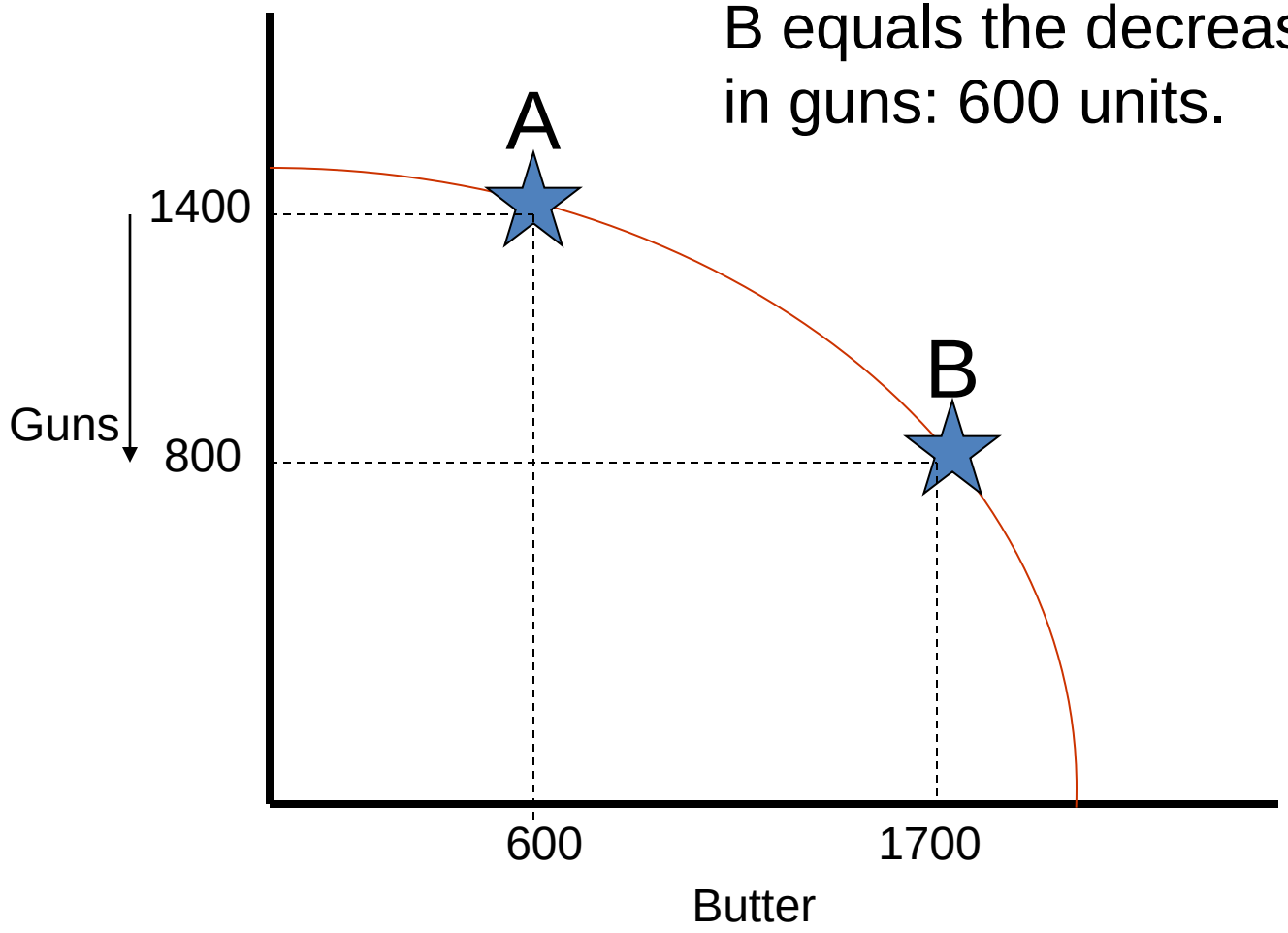
PPF for the Country ALPHA

The opportunity cost of A equals the decrease in butter: 1100 units.



PPF for the Country ALPHA

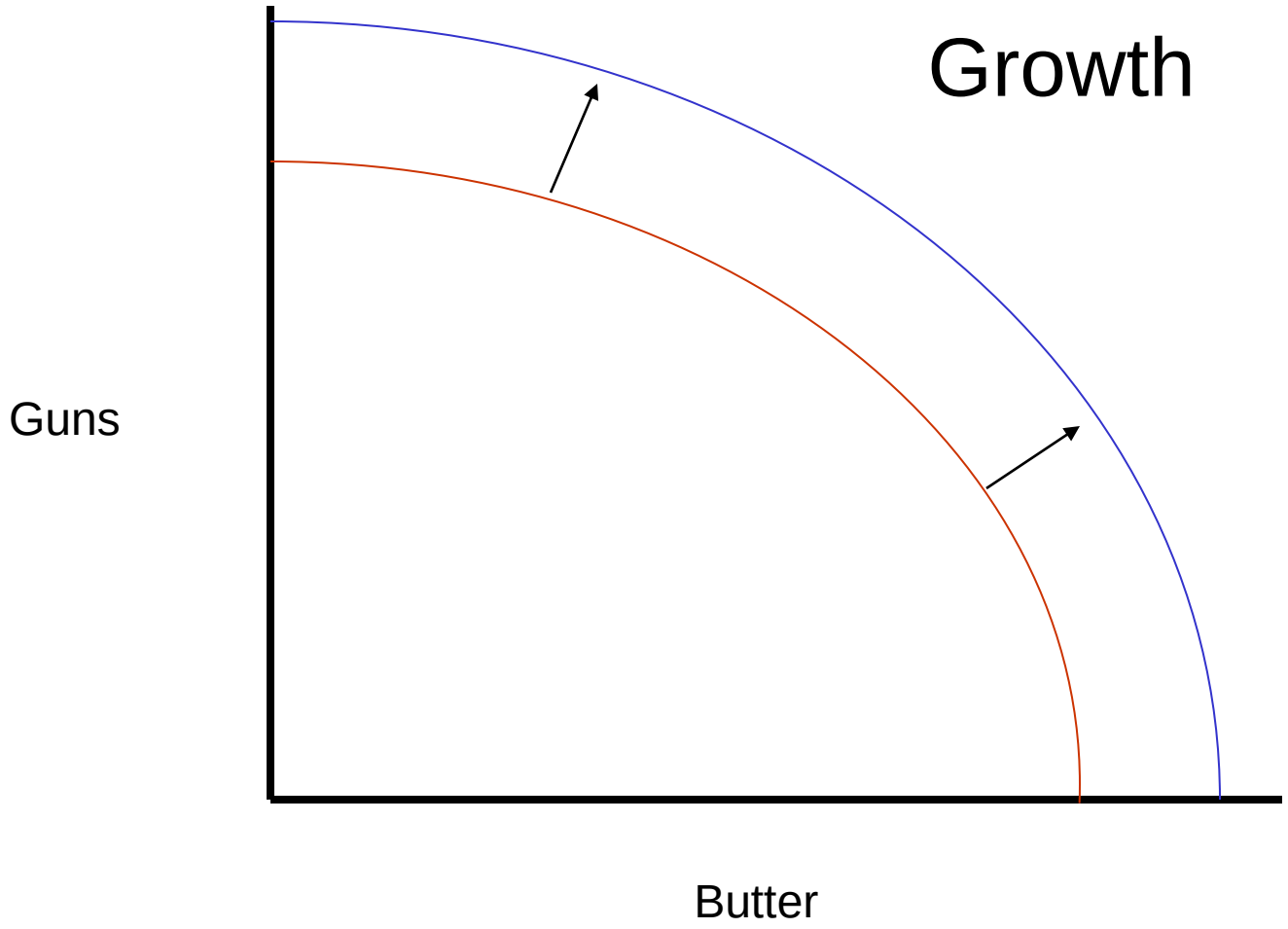
The opportunity cost of B equals the decrease in guns: 600 units.



The PPF can also show economic growth by moving outward.

This may occur due to additional resources, increasing population, or new technology.

PPF for the Country ALPHA



Review

- Any point on the graph shows how much of both goods is being produced.
- Efficiency is shown by whether the point is on the curve (efficient) or within the curve (inefficient).
- Tradeoffs are shown by any two points on the curve.
- Opportunity cost is shown by the decrease in one good when the other is increased.
- Growth is shown by the frontier moving outward.
- Constant opportunity cost- is a constant decrease and increase up the line