

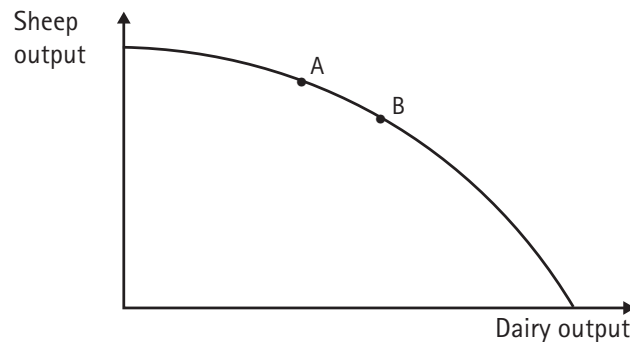


eLearneconomics: Production possibility curve (1)

Student response _____

Use the production possibility curve to answer the questions that follow.

Graph 1: A Production Possibility Curve for Sheep and Dairy



(a) How does the production possibility curve (PPC) in Graph 1 illustrate:

(i) Scarcity?

(ii) Opportunity Cost?

(b) Explain why the production possibility frontier is drawn as 'bowed' out from the origin.

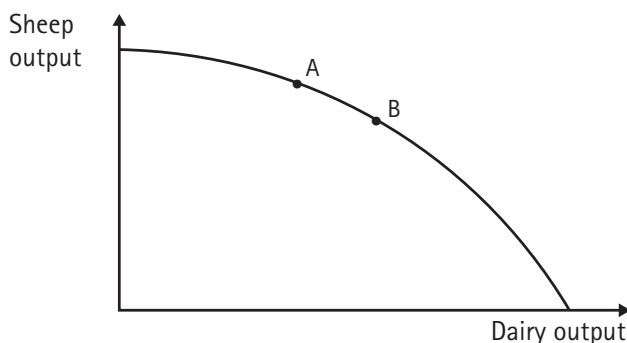
(c) Explain why the production possibility frontier is drawn as a straight line.



Solutions

Use the production possibility curve to answer the questions that follow.

Graph 1: A Production Possibility Curve for Sheep and Dairy



(a) How does the production possibility curve (PPC) in Graph 1 illustrate:

(i) Scarcity?

There is a limit to the amount of organic produce that can be produced because economic resources are scarce, or because resources are scarce the producers cannot operate beyond the PPC.

(ii) Opportunity Cost?

Idea – can only have more sheep output (dairy output) if they forego/sacrifice dairy output (sheep output).

(b) Explain why the production possibility frontier is drawn as 'bowed' out from the origin.

Inputs (resources) are more suited to the production of one good, and others in the production of the second good. Under these circumstances it is expected the output per unit of composite input of either of two goods will grow at an ultimately diminishing rate as you move from one end of the curve to the other.

(c) Explain why the production possibility frontier is drawn as a straight line.

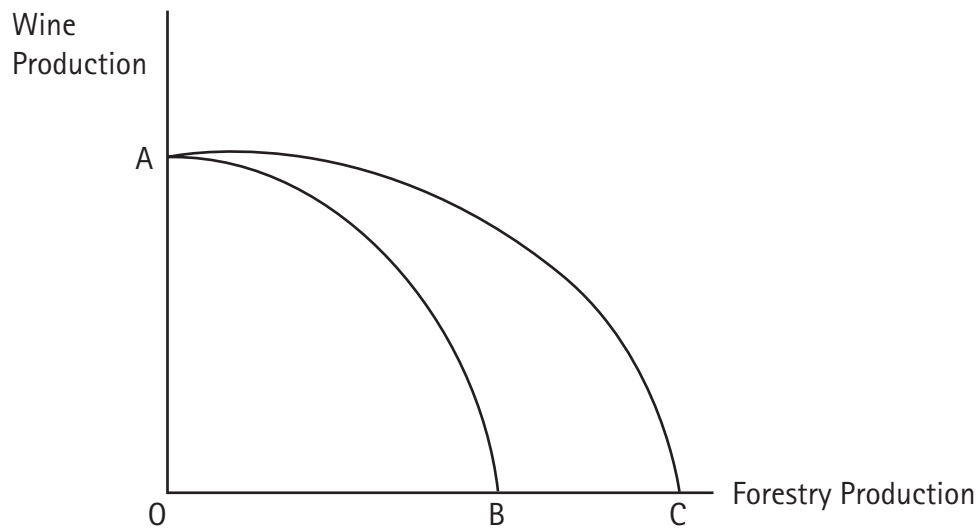
Inputs (resources) are equally suited to the production of either good. Additional increments of one output require constant decreases in the other output.



eLearneconomics: Production possibility curve (2)

Student response _____

Graph Two: Production Possibility Curve for Wine and Forestry.



(a) List TWO assumptions underlying a production possibility curve.

(b) (i) Illustrate and clearly label on Graph Two the concept of opportunity cost.

(ii) With specific reference to Graph Two, explain your answer to (b)(i) above.

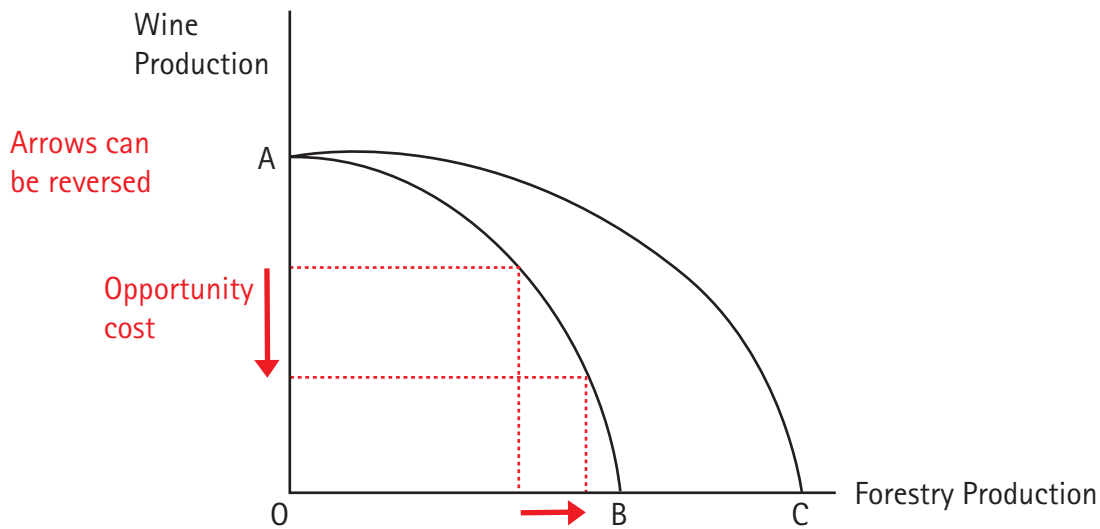
(c) State a reason, specific to forestry and wine production, for a shift of the curve from AB to AC.

(d) Why are production possibility curves usually drawn concave to the origin (i.e., with the shape shown in Graph Two)?



Solutions

Graph Two: Production Possibility Curve for Wine and Forestry.



(a) List TWO assumptions underlying a production possibility curve.

Two goods only, given level of technology, fixed resources.

(b) (i) Illustrate and clearly label on Graph Two the concept of opportunity cost.

(ii) With specific reference to Graph Two, explain your answer to (b)(i) above.

Because resources are scarce, wine production must be given up (vice versa if the arrows are reversed) to obtain more forestry production.

(c) State a reason, specific to forestry and wine production, for a shift of the curve from AB to AC.

The answer must be specific to forestry, e.g., development of improved forestry technology, faster growing trees.

(d) Why are production possibility curves usually drawn concave to the origin (i.e., with the shape shown in Graph Two)?

The idea of increasing costs due to diminishing returns or the non-transferability of resources.