

Chapter 2

1. Identify the parts of the circular-flow diagram immediately involved in the following transactions.

a. Mary buys a car from Jaguar for €40,000.

Answer:

€40,000 of spending from households to market for goods and services. Car moves from market for goods and services to household. €40,000 of revenue from market for goods and services to firms while car moves from firm to market for goods and services.

b. Jaguar pays Joe €2,500/month for work on the assembly line.

Answer:

€2,500 of wages from firms to market for factors of production. Inputs move from market for factors of production to firms. Labour moves from households to market for factors of production while €2,500 income moves from market for factors to households.

c. Jan makes €10 worth of calls on his Vodafone mobile phone.

Answer:

€10 of spending from households to market for goods and services. Service moves from market for goods and services to household. Service moves from firms to market for goods and services in return for €10 revenue.

d. Monique receives €1,000 of dividends on her Vodafone shares.

Answer:

€1,000 of profit from firms to market for factors of production. Inputs move from market for factors of production to firms. Capital services move from households to market for factors of production in return for €1,000 income.

2. The following table provides information about the production possibilities frontier of Athletic Country.

Exhibit 1

Bats	Rackets
0	420
100	400
200	360
300	300
400	200
500	0

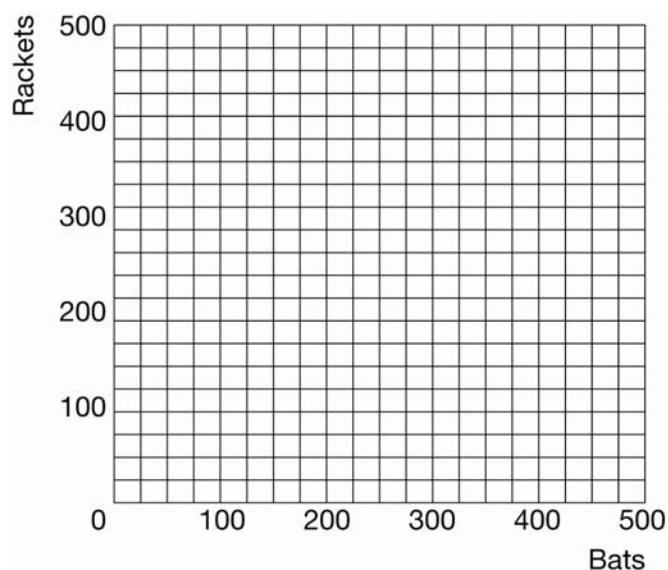
a. In Exhibit 2, plot and connect these points to create Athletic Country's production possibilities frontier.

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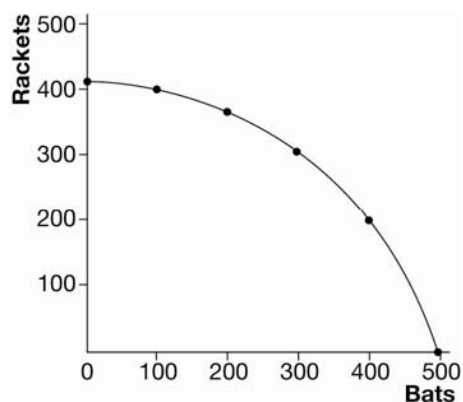
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Exhibit 2



Answer: See Exhibit 7.

Exhibit 7



- b. If Athletic Country currently produces 100 bats and 400 rackets, what is the opportunity cost of an additional 100 bats?

Answer: 40
rackets

- c. If Athletic Country currently produces 300 bats and 300 rackets, what is the opportunity cost of an additional 100 bats?

Answer: 100
rackets

- d. Why does the additional production of 100 bats in part (c) cause a greater trade-off than the additional production of 100 bats in part (b)?

Answer:

Because as we produce more bats, the resources best suited for making bats are already

being used. Therefore it takes even more resources to produce 100 bats and greater reductions in racket production.

- e. Suppose Athletic Country is currently producing 200 bats and 200 rackets. How many additional bats could they produce without giving up any rackets? How many additional rackets could they produce without giving up any bats?

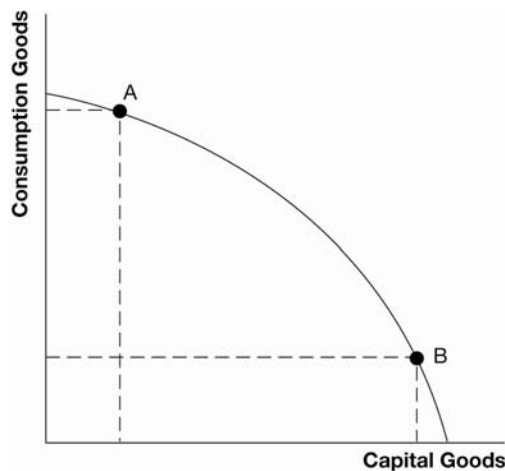
Answer:
200 bats; 160 rackets

- f. Is the production of 200 bats and 200 rackets efficient? Explain.

Answer:
No. Resources were not used efficiently if production can be increased with no opportunity cost.

3. The production possibilities frontier in Exhibit 3 shows the available trade-offs between consumption goods and capital goods. Suppose two countries face this identical production possibilities frontier.

Exhibit 3



- a. Suppose Country X chooses to produce at point A while Country Y choose to produce at point B. Which country will experience more growth in the future? Why?

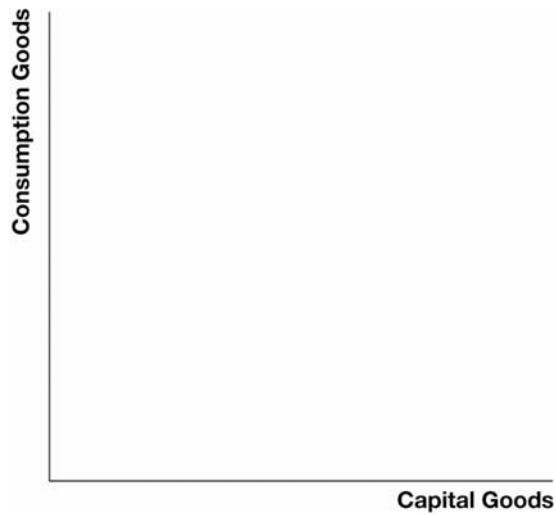
Answer:
Country Y. Capital (plant and equipment) is a factor of production and producing more of it now will increase future production.

- b. In this model, what is the opportunity cost of future growth?

Answer:
Fewer consumption goods are produced now.

- c. Demonstrate in Exhibit 4 the impact of growth on a production possibilities frontier such as the one shown above. Would the production possibilities frontier for Country Y shift more or less than that for Country X? Why?

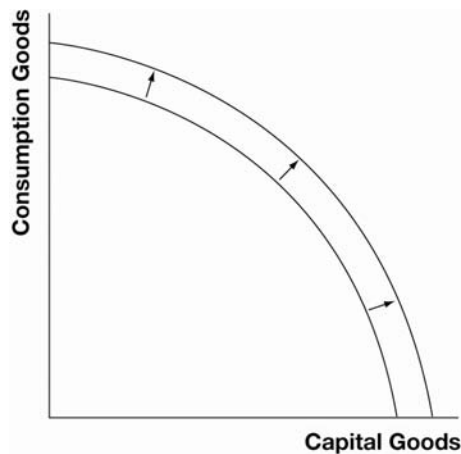
Exhibit 4



Answer:

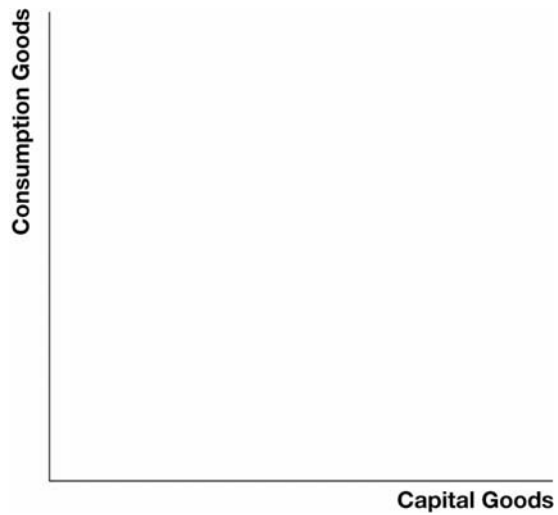
See Exhibit 8. The production possibilities curve will shift more for Country Y because they have experienced a greater increase in factors of production (capital).

Exhibit 8



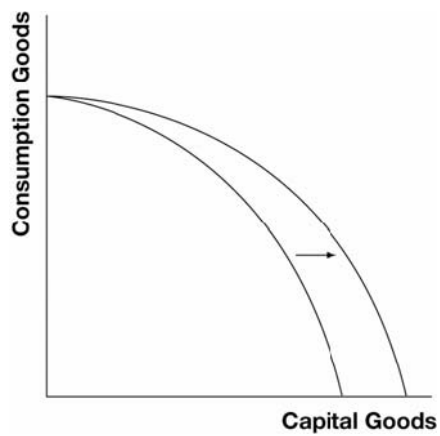
- d. On the graph in Exhibit 5, show the shift in the production possibilities curve if there was an increase in technology that only affected the production of capital goods.

Exhibit 5



Answer: See Exhibit 9.

Exhibit 9



- e. Does the shift in part (d) above imply that all additional production must be in the form of capital goods? Why?

Answer:

No, the outward shift improves choices available for both consumption and capital goods.