

In one month,

	Malaysia	Turkey
lemons (in tonnes)	80	120
circuit boards (in tonnes)	320	30

- a) Turkey has an absolute advantage in producing lemons. (It can produce 120 tonnes of lemon in a month, whereas Malaysia can produce 80 tonnes in a month).

Malaysia has an absolute advantage in producing circuit boards. (It can produce 320 tonnes of boards in a month, whereas Turkey can produce 30 tonnes in a month).

b) Opportunity cost of producing lemons for Malaysia:

320 lemons = 320 circuit boards

1 lemon = 1 circuit board

Opportunity cost of producing lemons for Turkey:

30 lemons = 30 circuit boards

1 lemon =  $\frac{1}{30}$  circuit boards

= 0.25 circuit boards

Since, lower opportunity cost brings comparative advantage,  
Turkey has a comparative advantage in producing lemons.

Similarly,

Opportunity cost of producing circuit boards for Malaysia:

$$320 \text{ circuit boards} = 80 \text{ lemons}$$

$$1 \text{ board} = 0.25 \text{ lemons}$$

Opportunity cost of producing circuit boards for Turkey:

$$30 \text{ boards} = 120 \text{ lemons}$$

$$1 \text{ board} = 4 \text{ lemons}$$

Since, lower opportunity cost brings comparative advantage, Malaysia has a comparative advantage in producing circuit boards.

c) specialization is based on comparative advantage so, Malaysia will produce circuit boards and Turkey will produce lemons.

d) Malaysia produces 320 tonnes of circuit boards out of which it exports 50 tonnes to Turkey.

Turkey produces 120 tonnes of lemons out of which it exports 75 tonnes to Malaysia.

Before Trade,

Consumption by Turkey:

Circuit Boards = 25 tonnes

Lemons = 20 tonnes

Consumption by Malaysia:

Circuit Boards = 20 tonnes

Lemons = 30 tonnes

∴ Gain from specialization and trade for Malaysia :

Increase in consumption of lemons =  $75 - 30 = 45$  tonnes

Increase in consumption of circuit boards =  $270 - 200 = 70$  tonnes

∴ Gain from specialization and trade for Turkey :

Increase in consumption of lemons =  $45 - 20 = 25$  tonnes

and,

Increase in consumption of  
circuit boards =  $50 - 25$   
= 25 tonnes