1. Are the resources of this economy equally well suited for the production of both Frisbees and butter, or do you think the resources are specialized? Explain your answer.

→ Here we see that the slope of the PPF is “bowed out” indicating that the opportunity cost of each good increases as more of that good is produced. Hence, the law of increasing opportunity costs holds, indicating that some resources are specialized for the production of one or the other of the goods.

2. Calculate the opportunity cost (in frisbees) associated with each of the following 20-unit increases in butter production:
   (a) a to b ⇒ opportunity cost of 20 units of butter = 5 frisbees. Therefore, over this range, the opportunity cost of 1 unit of butter is 0.25 frisbees.
   (b) b to c ⇒ opportunity cost of 20 units of butter = 10 frisbees. Therefore, over this range, the opportunity cost of 1 unit of butter is 0.50 frisbees.
   (c) c to d ⇒ opportunity cost of 20 units of butter = 20 frisbees. Therefore, over this range, the opportunity cost of 1 unit of butter is 1 frisbees.
   (d) d to e ⇒ opportunity cost of 20 units of butter = 25 frisbees. Therefore, over this range, the opportunity cost of 1 unit of butter is 1.25 frisbees.

3. Moving from d to c, the opportunity cost of 1 frisbee is 1 units of butter.

4. Which of the following are true? Explain why.
   (a) The opportunity cost of additional units of butter decreases as more units of butter are produced. FALSE
   (b) The opportunity cost of additional units of butter increases as more units of butter are produced. TRUE
   (c) The opportunity cost of additional frisbees decreases as more frisbees are produced. FALSE
   (d) The opportunity cost of additional frisbees increases as more frisbees are produced. TRUE

→ Law of increasing opportunity costs states that if resources are specialized, as more of a particular good is produced, its opportunity cost will increase.

5. In moving from point g to point b, the opportunity cost of 30 frisbees is 0 units of butter. Explain.
   → At point g, resources were underutilized (unemployed), hence, the economy was not achieving its productive potential. These unemployed resources could be put to use to make the 30 frisbees with no cost in terms of lost butter.

6. True or False: Point h is unattainable for this country. Explain.
   → False. Point h could possibly be attained through international trade. It is true that this country cannot produce output combination h without trade.

7. Production Possibilities Curves and Budget Lines both show how one good can be exchanged for another. That is, the slopes of these lines reveal the opportunity cost of one good in terms of another. Given this similarity, why does the PPC have a bowed-out shape while the budget line is a straight line?

→ With the PPF we have specialized resources, hence the law of increasing opportunity costs holds, as is reflected in the changing slope of the PPF. With the budget line, the resource in question (money) is not specialized for one good or the other, hence opportunity cost and slope of the BL are constant.