**Practice questions: Consumer Preferences and Choice**

1. The following graph indicates that the consumer
    a. at A is indifferent between 0a of apples and 0b of butter
    b. at A is consuming either 0a of apples or 0b of butter.
    c. **is indifferent between 0a of apples plus 0b of butter on the one hand and 0c of apples plus 0d of butter on the other.**
    d. is correctly described by all of the above
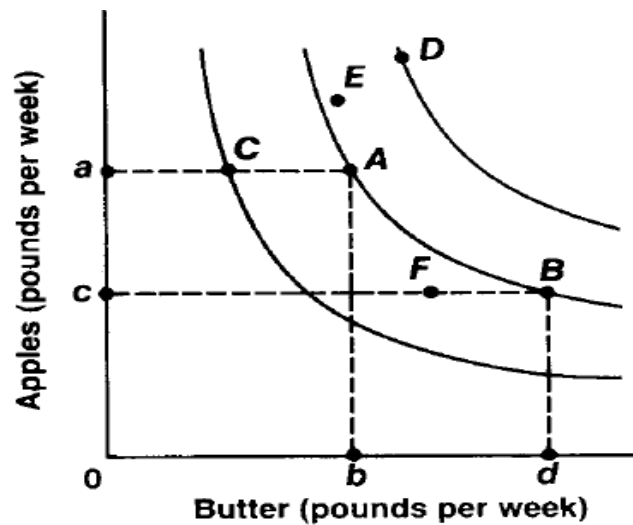
2. This graph also shows the consumer's marginal rate of substitution in the AB range to be
    a. 0a of apples for 0d of butter.
    b. 0a of apples for 0b of butter.
    c. 0c of apples for 0d of butter.
    d. **ac of apples for bd of butter.**
3. If a consumer's marginal rate of substitution equals 2 eggs for 1 hamburger,
    a. the consumer's indifference curve must be positively sloped.
    b. the consumer's indifference curve must be convex with respect to the origin of the graph.
    c. **the ratio of the consumer's marginal utility of 1 egg to that of 1 hamburger must equal ½.**
   d. all of the above are true.

4. All points on or below a budget constraint

      a. are equally desirable.

      b. represent market basket combinations that exhaust the income available.

      c. are attainable with the given income

      d. are described, in part, by a, b, and c above

5. If A, B, C, and D are any four market baskets, and if the consumer has ranked them so that D is preferred to C, A is not preferred to B, and B is not preferred to C, then

      a. A is preferred to C.

      b. A is preferred to D.

      c. B is preferred to D.

      d. D is preferred to A.

      e. D is not preferred to B.

6. If the prices of both goods increase by the same percent, the budget line will

      a. shift parallel to the left.

      b. shift parallel to the right.

      c. pivot about the x axis.

      d. pivot about the y axis.

      e. none of the above.

7. The principle that "More is better" results in indifference curves

      a. sloping down.

      b. not intersecting.

      c. reflecting greater preferences the further they are from the origin.

      d. **All of the above**

8. There is an indifference curve through every bundle because of the assumption of

      a. transitivity.

      b. completeness.

      c. rationality.

      d. Non-satiation.

9. If two indifference curves were to intersect at a point, this would violate the assumption of

      a. transitivity.

      b. completeness.

      c. Both A and B above.

      d. None of the above.

10. Indifference curves that are thick violate

    a. the assumption of transitivity.

    b. the assumption that more is better.

    c. the assumption of completeness.

    d. none of the assumptions.

11. Convexity of indifference curves implies that consumers are willing to

    a. give up more "y" to get an extra "x" the more "x" they have.

    b. give up more "y" to get an extra "x" the less "x" they have.

    c. settle for less of both "x" and "y".

    d. acquire more "x" only if they do not have to give up any "y".

12. If Fred's marginal utility of pizza equals 10 and his marginal utility of salad equals 2, then

    a. he would give up 5 pizzas to get the next salad.

    b. he would give up 5 salads to get the next pizza.

    c. he will eat five times as much pizza as salad.

    d. he will eat five times as much salad as pizza.

13. Measuring "y" on the vertical axis and "x" on the horizontal axis, convexity of indifference curves implies that the MRS of "y" for "x"

    a. is decreasing as "x" increases.

    b. is increasing as "x" increases.

    c. is constant as "x" increases.

    d. cannot be calculated for large levels of "x".

14. If the utility for two goods "x" and "y" is measured as $U = x + y$, then it can be concluded that

    a. "x" and "y" are perfect substitutes.

    b. "x" and "y" are perfect complements.

    c. "x" and "y" are both bads.

    d. the indifference curves on the x,y graph will be upward sloping.

15. If the utility for two goods "x" and "y" can be measured as $U = x$, then it can be concluded that

    a. "x" and "y" are perfect complements.

    b. "y" is a "bad".

    c. the indifference curves on the x,y graph are upward sloping where "x" is measured on the horizontal axis.

    d. the indifference curves on the x,y graph are vertical where "x" is measured on the horizontal axis.

Examples of unique indifference curves

Case 1: The indifference curve represents one good and one bad

When one of the two goods represented in the indifference curve is a bad it means that the consumer prefers less of that good (the bad) rather than more of the good. In that case, a set of indifference curves is upward sloping. The positive slope means that the consumer will accept more of the bad good only if she also receives more of the other good in return. As we move up along the indifference curve the consumer has more of the good she likes, and also more of the good she does not like. This violates the assumption that more is preferred to less.

Bad

worse

better
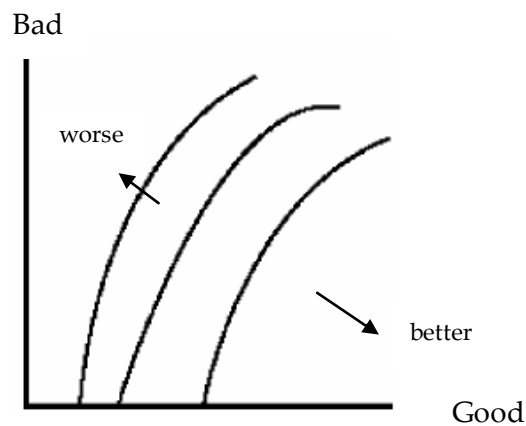
Good

Case 2: A consumer, Samantha, with **convex** preferences and dislike for both hamburgers and soft drinks (2 bads)

Since Samantha dislikes both goods, her set of indifference curves will be bowed inwards towards the origin instead of outwards, as in the normal case where more is preferred to less. Given she dislikes both goods, her satisfaction is increasing in the direction of the origin. Convexity of preferences implies her indifference curves will have the normal shape in that they are bowed towards the direction of increasing satisfaction. Convexity also implies that given any two bundles between which the consumer is indifferent, the "average" of the two bundles will be in the preferred set, or will leave her at least as well off.

hamburger

4

soft drink