🖉 16. Suppose that there are only two goods, books and coffee. Wally gets utility from both books and coffee, but his indifference curves between them are concave rather than convex to the origin.

a. Draw a set of indifference curves for Wally.

b. What do these particular indifference curves tell you about Wally's marginal rate of substitution between books and coffee?

c. What will Wally's utility-maximizing bundle look like? (*Hint*: Assume some level of income for Wally, and some prices for books and coffee; then draw a budget constraint.)

d. Compare your answer to (b) to real-world behaviors. Does the comparison shed any light on why economists generally assume convex preferences?

e. Will the Lagrangian approach be useful in solving for a maximum in this circumstance (i.e., when indifference curves are concave rather than convex to the origin)? Why or why not?