Use the following information to answer questions (1) through (4): Irving enjoys consuming hamburgers and sodas on a daily basis. His daily budget (i.e., income) is $14, the price of a hamburger is $6, and the price of a soda is $2. Suppose the following applies to Irving:

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[1] The marginal utility of the 2nd hamburger consumed per day equals:

A. 26
B. 22
C. 15
D. None of the above

[2] The total utility of 5 sodas equals:

A. 67
B. 65
C. 50
D. None of the above

[3] The marginal utility per dollar of the 3rd soda equals:

A. 23.5
B. 12
C. 6
D. None of the above

[4] Wishing to maximize his total satisfaction across these goods, subject to his budget constraint, Irving will consume ___ sodas per day.

A. 1
B. 2
C. 3
D. 4
[5] Akio has $500 a week to spend on clothing and food. The price of clothing is $25 and the price of food is $10. Akio spends his entire income when he purchases _______ units of clothing and _______ units of food.

A. 10; 10
B. 25; 5
C. 12; 20
D. 16; 8

[5] This is the only option where his expenditure on clothing \((25 \times 12 = 300)\) + his expenditure on food \((10 \times 20 = 200)\) equals his income of $500.

[6] For Viviana, pizza is a good. She eats five slices of pizza on a Saturday night but admits each slice of pizza doesn’t taste as good as the previous one. This suggests that for Viviana the:

A. marginal utility of a slice of pizza is positive but falls as more slices are eaten.
B. marginal utility of a slice of pizza is negative.
C. total utility of slices of pizza is positive but falls as more slices are eaten.
D. total utility of slices of pizza is negative.

[7] We would expect the cross elasticity of demand between Pepsi and Coca Cola to be:

A. positive, indicating normal goods.
B. positive, indicating inferior goods.
C. positive, indicating substitute goods.
D. negative, indicating substitute goods.

[8] Potatoes are an inferior good. Hence, the income elasticity for potatoes is negative.

A. True
B. False

[9] Suppose every morning Druki buys soda and coffee. At her current consumption level, Druki’s marginal utility from drinking the last can of soda is 40 utils and her marginal utility from drinking the last cup of coffee is 30 utils. The price of a can of soda is $1, and the price of a cup of coffee is $1.50. To maximize her total utility across both goods, given her current income, what should Druki do?

A. She should not change her consumption of soda and coffee since the marginal utility per dollar spent is the same for both goods.
B. She should not change her consumption of soda and coffee since the marginal utility per dollar spent is not the same for both goods.
C. She should buy more coffee and less soda.
D. She should buy more soda and less coffee.

[10] For the sake of discussion, let bundle A = 3 hotdogs and 2 pizzas, bundle B = 2 hotdogs and 3 pizzas, and bundle C = 1 burrito and 4 tacos. For a particular consumer, if consuming bundle C is preferred to bundle B, and consuming bundle B is preferred to bundle A, then according to transitivity it must be that consuming bundle A is preferred to consuming bundle C.

A. True
B. False

IF C IS PREFERRED TO B

\[\frac{MU_{soda}}{P_{soda}} > \frac{MU_{coffee}}{P_{coffee}}\]

THEN C IS PREFERRED TO A
FORM B

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At q_{burger} = 1 and q_{soda} = 4, Irving is spending all his income and maximizing his total satisfaction (since \( \frac{MU_{burger}}{P_{burger}} = \frac{MU_{soda}}{P_{soda}} = 5 \)).