

MAP 2

Budget constraint / preferences

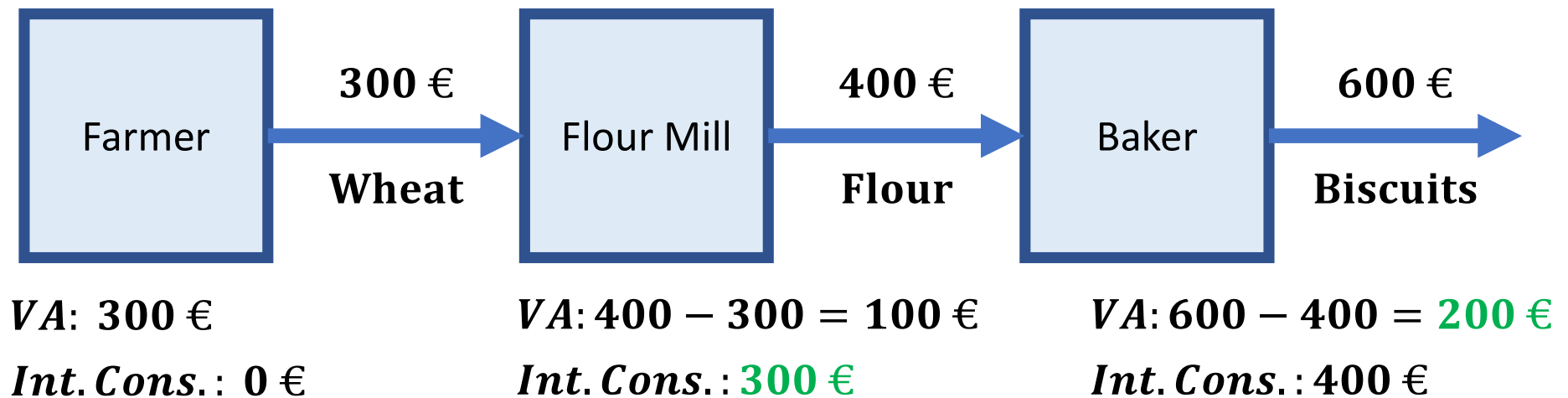
EARN

24th September 2024

A farmer produces wheat in his fields and sells it to a flour mill for 300 €. The miller then makes flour and sells it to a baker for 400 €. Finally, the baker prepares biscuits using that flour and makes 600 € in total sales to consumers. The value added of the baker and the intermediate consumption of the miller are, respectively:

- a. 200 €; 300 €.
- b. 700 €; 500 €.
- c. 200 €; 200 €.
- d. 500 €; 300 €.

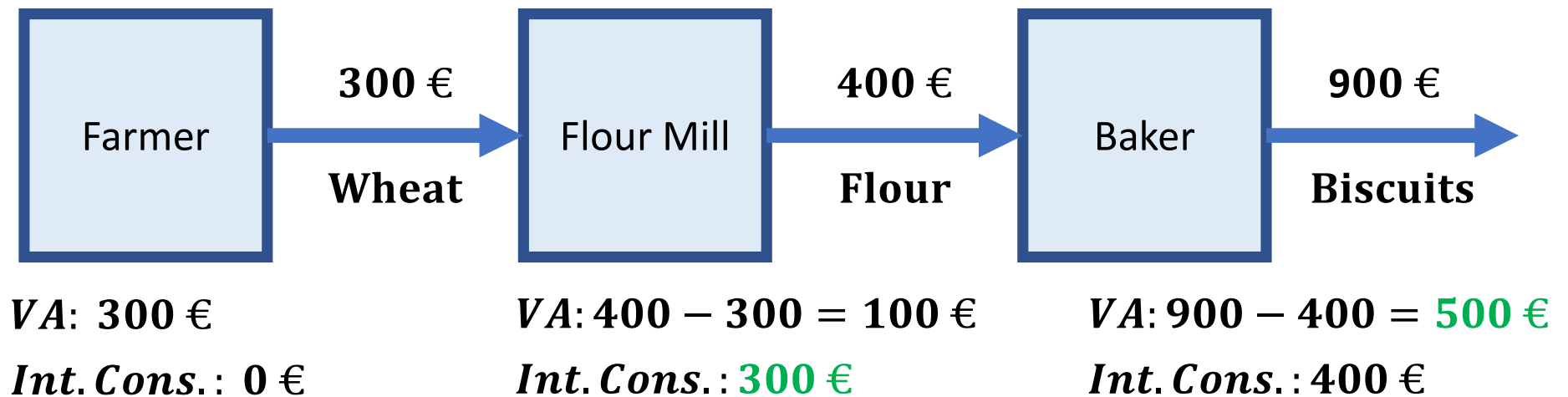
Correct answer.



A farmer produces wheat in his fields and sells it to a flour mill for 300 €. The miller then makes flour and sells it to a baker for 400 €. Finally, the baker prepares biscuits using that flour and makes 900 € in total sales to consumers. The value added of the baker and the intermediate consumption of the miller are, respectively:

- a. 700 €; 500 €.
- b. 500 €; 300 €.**
- c. 200 €; 300 €.
- d. 200 €; 200 €.

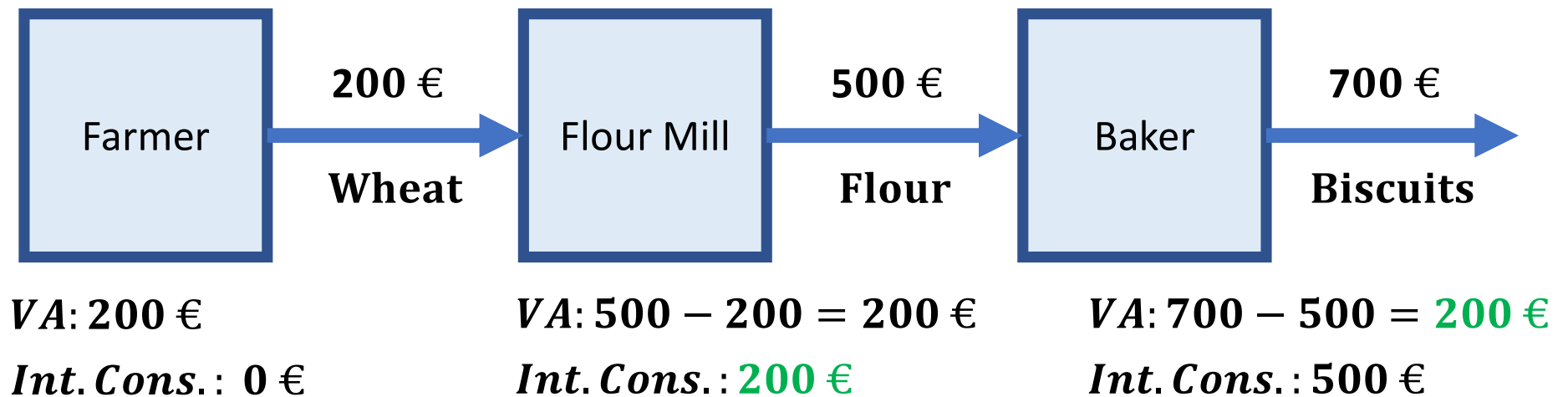
Correct answer.



A farmer produces wheat in his fields and sells it to a flour mill for 200 €. The miller then makes flour and sells it to a baker for 500 €. Finally, the baker prepares biscuits using that flour and makes 700 € in total sales to consumers. The value added of the baker and the intermediate consumption of the miller are, respectively:

- a. 500 €; 300 €.
- b. 700 €; 500 €.
- c. **200 €; 200 €.**
- d. 200 €; 300 €.

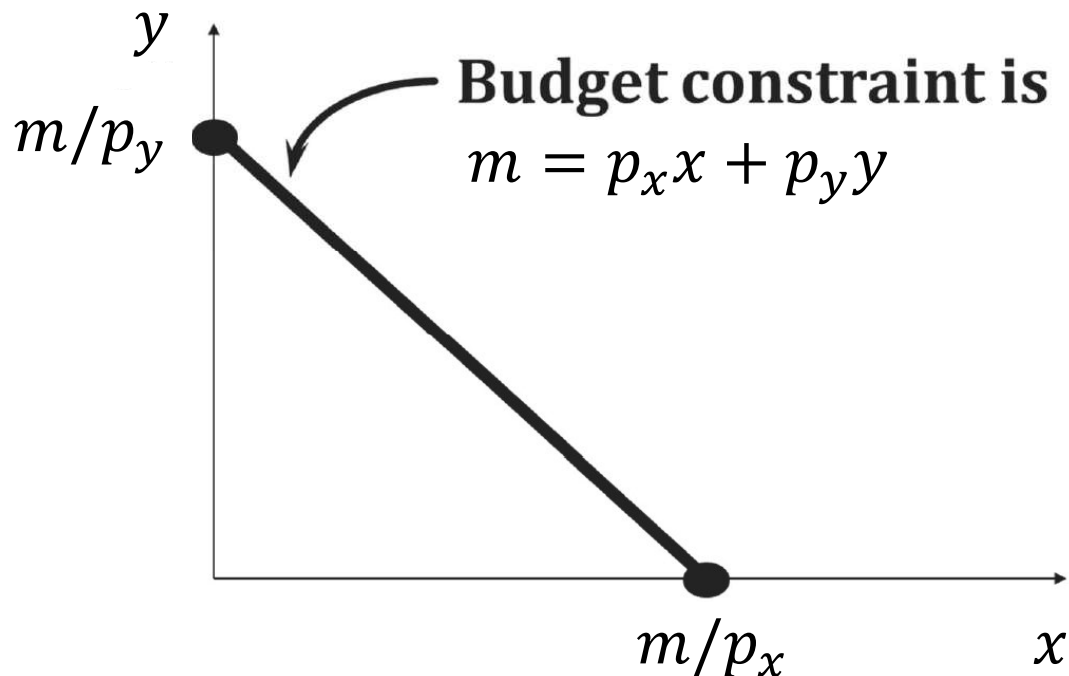
Correct answer.



Consider a budget constraint for two goods X and Y, drawn on a graph. The X-intercept of the budget constraint represents:

- a. How much of good X can be purchased if no good Y is purchased and all income is spent.
- b. How much of good Y can be purchased if no good X is purchased and all income is spent.
- c. Total income divided by the price of X.
- d. Both a. and c.

Budget Set and Constraint for Two Commodities – 1



Sarah consumes plums and pears. She claims that she would prefer a bundle of 2 plums and 1 pear to a bundle of 3 plums and 2 pears, and a bundle of 3 plums and 2 pears to a bundle of 2 plums and 3 pears. On the other hand, she also claims she would prefer a bundle of 2 plums and 3 pears to a bundle of 2 plums and 1 pear. Sarah's preferences clearly violate:

- | | |
|-------------------------|-----------------------|
| a. Completeness. | $(2; 1) \succ (3; 2)$ |
| b. Reflexivity. | $(3; 2) \succ (2; 3)$ |
| c. Transitivity. | $(2; 3) \succ (2; 1)$ |
| d. None of the above. | |

Assumptions about Preference Relations – 3

Transitivity: If

x is at least as preferred as y , and
 y is at least as preferred as z , then
 x is at least as preferred as z ; i.e.,

$$x \succeq y \text{ and } y \succeq z \Rightarrow x \succeq z.$$

In which of the following cases would the budget constraint move out from the origin without changing its slope?

- a. The prices of good 1 and 2 both increase by 10% while income increases by 5%.
- b. The prices of good 1 and 2 both fall by 20% while income falls by 10%.**
- c. Income decreases by 3%.
- d. The prices of good 1 and 2 both increase 2%.

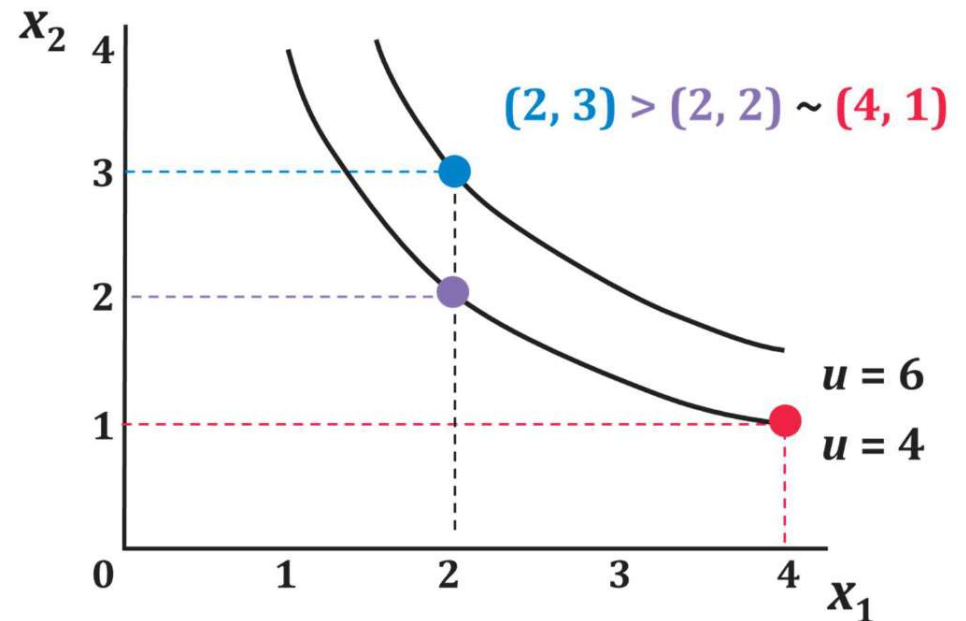
$$m = p_1x_1 + p_2x_2$$

$$x_2 = \frac{m}{p_2} - \frac{p_1}{p_2}x_1$$

$$x_2 = \underbrace{\frac{(1 - 0.1)m}{(1 - 0.2)p_2}}_{> \frac{m}{p_2}} - \overbrace{\frac{(1 - 0.2)p_1}{(1 - 0.2)p_2}x_1}^{\text{Slope unchanged}}$$

Any pair of consumption bundles on an indifference curve:

- Are not comparable.
- Give the same utility.**
- Cost the same.
- Are associated with different levels of utility.



Utility Functions & Indifference Curves – 2

- An indifference curve contains equally preferred bundles.
- Equal preference \implies same utility level.
- Therefore, all bundles on an indifference curve have the same utility level.