

Chapter 3

- 1) Why do we expect a good that is *abundant* to have zero price?
- 2) Is tap water a free good?
- 3) Amanda's consumption bundle consists of quantities of beans and chickpeas. Define the opportunity cost of beans that she faces.
- 4) Suppose that Amanda is able to spend $m = 48$. The price of 1kg of beans, $p_b = 6$, and the cost of 1kg of chickpeas, $p_c = 4$. Amanda currently buys the consumption bundle $(b, c) = (4, 4)$. What would you consider to be her opportunity cost of beans?
- 5) Suppose that the price of beans increases to $p_{b1} = 8$. Sketch a diagram showing Amanda's affordability constraint before and after the price change.
- 6) Assume that Amanda buys the same consumption bundle $(4, 4)$ before and after the price change. What happens to her opportunity cost of beans?
- 7) Explain why we consider the affordable set for Amanda to be weakly convex.
- 8) Suppose that after the price change, Amanda is able to spend an amount $m = 60$. She continues to buy equal quantities of beans and chickpeas. What consumption bundle will she acquire if she spends her whole budget?
- 9) Suppose that Amanda has an initial endowment of 8kg of beans (and no chickpeas). Explain why this is equivalent to having an initial endowment, $m = 48$, and explain the effect of the increase in price from $p_b = 6$ to $p_{b1} = 8$ on her affordable set.
- 10) Suppose that Amanda has an initial endowment of 4kg of beans and 6kg of chickpeas. Explain why this is equivalent to having an initial endowment, $m = 48$, and explain the effect of the increase in price from $p_b = 6$ to $p_{b1} = 8$ on her affordable set.