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.**