1. The opportunity cost of the second cake is the flour and butter it uses.

   ☐ True ☐ False

2. With $Q_d = 1200 - 100P$ and $Q_s = 400 + 100P$, what is the equilibrium price, in £?

   _____ £

3. On $Q_d = 1200 - 100P$ at the price £4 (Q = 800), what is the point elasticity? Give the value with its sign, to one decimal.

   _____ ε

4. Output goes from 340 loaves with 4 bakers to 400 with 5. What is the fifth baker's marginal product, in loaves?

   _____ loaves

5. Why is a perfectly competitive firm's demand curve flat?

   ☐ because entry is blocked

   ☐ because marginal cost is constant

   ☐ it is too small for its output to move the market price

   ☐ because it sells an inferior good

6. Private marginal cost at Q = 740 is £3.40 and the external cost is £1.20 a loaf. What is the marginal social cost, in £?

   _____ £

7. Nimbus bakes one cake a day. What does the second cake cost?

   ☐ 8 loaves

   ☐ £8, the price of a cake

   ☐ 6 loaves

   ☐ 11 loaves

8. At a price of £2, how large is the shortage, in loaves?

   _____ loaves

9. The loaf moves from £4 to £5 and quantity falls 800 → 700. What happened to revenue, and why?

   ☐ cannot be told without knowing costs

   ☐ fell to £3,500, because demand is elastic

   ☐ stayed at £3,200, because the changes cancel

10. MC passes through ATC's minimum. Why?

    ☐ because the wage is constant

    ☐ it is a coincidence of this table

    ☐ a loaf cheaper than the average pulls the average down, and one dearer pushes it up – the turning point is where they meet

    ☐ because fixed cost is spread over more loaves

exercises.lol exercises.com.cn

1. **False**

   Opportunity cost is the next-best alternative given up – the 8 loaves those hours would have baked. Ingredients bought either way are not the cost.

2. **4 £**

   Setting the plans equal: $1200 - 100P = 400 + 100P$ gives $800 = 200P$, so $P^* = £4$ and $Q^* = 800$.

3. **-0.5** ε

   $\varepsilon = -100 \times \frac{4}{800} = -0.5$: quantity moves half as fast as price, in percentage terms.

4. **60 loaves**

   $400 - 340 = 60$ loaves – and the sequence 100, 90, 80, 70, 60… is diminishing returns in numbers.

5. **it is too small for its output to move the market price**

   With many sellers of an identical good, the firm can sell any amount at the market price – and nothing at a penny more. Price, AR and MR are one flat line.

6. **4.6 £**

   $MSC = MPC + 1.2 = 3.40 + 1.20 = £4.60$ – exactly the price buyers pay under the corrective tax, because at the optimum willingness-to-pay equals full social cost.

7. **8 loaves**

   The frontier falls from 66 to 58 loaves. The 6-loaf segment belongs to the first cake; the third would cost 11.

8. **400 loaves**

   Buyers plan $1200 - 200 = 1000$; bakers offer $400 + 200 = 600$. The 400-loaf gap bids the price up.

9. **rose to £3,500, because demand is inelastic at that step**

   Price rose 25% while quantity fell only 12.5% – the rectangle grew from 3,200 to 3,500. Costs are irrelevant to the revenue test.

10. **a loaf cheaper than the average pulls the average down, and one dearer pushes it up – the turning point is where they meet**

    The grade-point-average logic: one small grade pulls the average down, one large one pushes it up. The average can only turn at the marginal value.

exercises.lol exercises.com.cn