Solutions

Marking: **K** knowledge, **App** use of the case or data, **An** analysis (a chain of reasons: cause, then effect), **Ev** evaluation (a judgement with a reason). In calculations, **M1** is for the method and **A1** for the answer; **B1** is an independent mark.

Each answer shows the steps, then the **result**.

2.1

(a) variable; (b) fixed

(c) semi-variable; (d) step

2.2

1,000: $TC = £\mathbf{5{,}000}$, unit $£\mathbf{5.00}$

3,000: $TC = £\mathbf{9{,}000}$, unit $£\mathbf{3.00}$

2.3

$v = \dfrac{3{,}000}{1{,}500} = £\mathbf{2.00}$

$F = 6{,}500 - 2{,}000 = £\mathbf{4{,}500}$

2.4

unit cost $\dfrac{7{,}800}{3{,}000} = £\mathbf{2.60}$

one more meal: $£\mathbf{1.20}$, the variable cost

3.1

(a) high 1,400, low 800: $v = \dfrac{1{,}500}{600} = £\mathbf{2.50}$; $F = 4{,}200 - 2{,}000 = £\mathbf{2{,}200}$

(b) $2{,}200 + 3{,}000 = £\mathbf{5{,}200}$

(c) predicted £5,325 against £5,300: the line fits well

(d) it uses only two points, which may be unusual months; a step cost between them is wrongly counted as variable

3.2

(a) $6{,}000 + 6{,}000 = £\mathbf{12{,}000}$; $7{,}500 + 9{,}000 = £\mathbf{16{,}500}$

(b) $£\mathbf{3.00}$ and $£\mathbf{2.75}$; £2.75 is the unit cost at 6,000 loaves; at 4,000 the fixed cost is spread over fewer loaves, so the true unit cost is £3.00

3.3

(a) $2{,}000 \times 1.20 = 2{,}400$; output reaches 6,500, so add the £900 step; £3,300, $£\mathbf{1.65}$ a meal

(b) £2.13 includes fixed costs that are paid anyway; and it misses the £900 step the order causes

(c) at least £1.65 a meal covers the extra cost; add a margin, e.g. £2.00; other factor: whether the low price damages the price to existing customers, or uses capacity needed for growth

exercises.lol exercises.com.cn