What is Average Cost?

Worksheet

Average cost (AC) is total cost divided by total units: AC = TC ÷ Q. For example, if 100 units cost £1000 to produce, the average cost per unit is £10.

Questions

1. Total cost is £5000 for 200 units. What is average cost?

A) £25
B) £5000
C) £200
D) £1

2. AC typically falls at first because…

A) workers are cheaper
B) fixed costs are spread over more output
C) variable costs don't exist
D) prices are lower

3. A firm has £10,000 in fixed costs and £2 variable cost per unit. At 2000 units, what is AC?

A) £5
B) £7
C) £12
D) £2

4. What does a U-shaped AC curve tell us?

A) The firm is failing
B) Economies of scale early, diseconomies late
C) Costs never change
D) Production is always rising

5. A bakery's total monthly cost is £3000, producing 300 loaves. What is the average cost per loaf?

6. A factory produces 1000 units annually at a total cost of £25,000. Calculate average cost.

7. A startup incurs £50,000 in fixed costs plus £5 per unit. At 2000 units, what is AC?

8. Define: What is average cost?

9. Define: Why does AC fall with larger production?

10. Define: Can AC rise even as production grows?

Answer Key

1. A) £25 — AC = Total cost ÷ Quantity = £5000 ÷ 200 = £25 per unit.

2. B) fixed costs are spread over more output — Rent, machinery, and other fixed costs are divided by more units.

3. B) £7 — Total cost = £10,000 + (£2 × 2000) = £14,000; AC = £14,000 ÷ 2000 = £7 per unit.

4. B) Economies of scale early, diseconomies late — Spreading fixed costs → AC falls. Congestion/resource limits → AC rises.

5. Total cost = £3000 Total units = 300 loaves AC = £3000 ÷ 300 = £10 per loaf

6. Total cost = £25,000 Total units = 1000 AC = £25,000 ÷ 1000 = £25 per unit

7. Total cost = £50,000 + (£5 × 2000) = £50,000 + £10,000 = £60,000 AC = £60,000 ÷ 2000 = £30 per unit

8. Total production cost divided by total units: AC = TC ÷ Q.

9. Fixed costs (rent, machinery) are spread over more units, so the per-unit burden shrinks.

10. Yes, if variable costs (labour, materials) rise faster than fixed costs decrease.