

How should Chainline Bike Repairs pay for its van?

Student tasks | Original TBS lesson for GCSE Business (AQA 8132 content, section 3.6.1 Sources of finance)

Leah, 24, set up Chainline Bike Repairs Ltd in a small UK town three years ago. It is a private limited company and Leah owns all of its shares. She wants a used van fitted out as a mobile workshop, with tools, to repair bikes at offices, schools and homes. The van and tools cost £12,000. The van should last about 6 years and bring in about £500 a month of extra cash after running costs. Compare five ways to raise the money, then recommend one.

Before you start you should know: an internal source of finance comes from inside the business; an external source comes from outside it. Retained profit is profit kept in the business instead of being paid out to the owners. Interest is the extra money paid for borrowing. You need a calculator. This is original classroom practice, not an exam paper. The business, the people and every figure are fictional.

The five options for £12,000

Option	How it works	Cost and conditions
A: bank loan	The bank lends £12,000. The business repays it in equal monthly payments over 4 years.	Interest of 8% a year, fixed for all 4 years.
B: overdraft	The bank lets the business bank account go up to £12,000 below zero.	Interest of 18% a year on the amount overdrawn. The rate can change, and the bank can ask for the money back at any time.
C: hire purchase	The van dealer lets the business pay in instalments.	A deposit of 10% of £12,000 now, then 36 monthly payments of £375. The dealer owns the van until the last payment.
D: Sam buys shares	Leah's friend Sam buys new shares in the business for £12,000.	Nothing to repay. Sam would own 25% of the business, receive 25% of any profit paid out to the owners and vote on big decisions.
E: retained profit	Last year's profit was £21,000. £16,000 was paid out to Leah and £5,000 was kept.	Only the £5,000 is available. No interest and nothing to repay.

Starter: internal (I) or external (E)?

Source of finance	Write I or E
(i) Retained profit	
(ii) A bank loan	
(iii) Selling unwanted assets, such as an old workbench	
(iv) An overdraft	
(v) A government grant	
(vi) Hire purchase	

Task 1: what does borrowing cost?

The van and tools cost £12,000. Option A: a bank loan of £12,000 over 4 years at 8% a year, fixed. Option B: an overdraft at 18% a year on the amount overdrawn. To keep the sums simple, assume the loan's interest is 8% of the full £12,000 in each of the 4 years, and the overdraft is used for the full £12,000 for a whole year.

a. Complete the table for Option A, the bank loan. Monthly payment = total repaid / 48 months.

Bank loan (Option A)	Answer (£)
Interest each year	
Total interest over 4 years	
Total repaid (amount borrowed + total interest)	
Monthly payment	

Working space:

b. Option B: how much interest would the overdraft cost in one year? How much is that a month on average?

c. Interest rates can change. If the overdraft rate rose from 18% to 21%, how much interest would it cost in a year? How much more is that?

d. Why would a rise in interest rates not change the cost of Option A?

Task 2: hire purchase, shares or retained profit?

Option C: hire purchase with a deposit of 10% of £12,000, then 36 monthly payments of £375. Option D: Sam buys new shares for £12,000 and receives 25% of any profit paid out to the owners. Last year the business paid out £16,000 of profit to Leah.

a. Complete the table for Option C, hire purchase.

Hire purchase (Option C)	Answer (£)
Deposit	
Total of the 36 monthly payments	
Total paid (deposit + monthly payments)	
Extra cost above the £12,000 price	

Working space:

b. Option D: if the business pays out £16,000 of profit next year, how much would Sam receive? How much would Leah receive?

c. Assume the business pays out £16,000 every year. How much would Sam receive over 4 years? Compare this with the £3,840 total interest on the bank loan (check it against your own answer to Task 1).

Task 2: hire purchase, shares or retained profit? (continued)

d. Option E: the van and tools cost £12,000, and £5,000 of retained profit is available. If Leah uses all £5,000, how much more does she still need? Give one reason she may not want to use all of it.

Task 3: short-term or long-term? (pairs)

Rule: short-term finance is usually repaid within one year. Long-term finance is repaid over more than one year, or is never repaid (money from selling shares).

a. With a partner, write S (short-term) or L (long-term) for each source of finance.

Source of finance	S or L
(i) An overdraft	
(ii) Trade credit: a supplier lets the business pay for bike parts 30 days after they arrive	
(iii) A bank loan repaid over 4 years	
(iv) Hire purchase over 3 years	
(v) A mortgage to buy a shop, repaid over 20 years	
(vi) A new share issue	

b. The van should last about 6 years. Does short-term or long-term finance suit it better? Explain why.

c. Leah also needs £1,500 of extra bike parts for a busy summer. She expects to sell them within 2 months. Which of the five options suits this best: A bank loan, B overdraft, C hire purchase, D Sam buys shares or E retained profit? Explain.

Task 4: for and against

Remember (check these against your own answers): A bank loan: 8% a year, fixed; £330 a month for 4 years; £3,840 interest in total. B overdraft: 18% a year; the rate can change and the bank can ask for the money back at any time. C hire purchase: £1,200 deposit, then £375 a month for 3 years; the dealer owns the van until the last payment. D Sam buys shares: nothing to repay, but Sam owns 25%, receives 25% of profit paid out (about £4,000 a year) and votes on big decisions. The van brings in about £500 a month.

For each option, write one advantage and one disadvantage for Leah's business.

A: bank loan

B: overdraft

C: hire purchase

D: Sam buys shares

Task 5: recommend

Key figures (check them against your own): A bank loan: £330 a month for 4 years, £3,840 interest in total, 8% fixed. B overdraft: £2,160 interest a year at 18%, or £2,520 if the rate rises to 21%. C hire purchase: £1,200 deposit, then £375 a month for 3 years, £2,700 extra in total. D Sam: about £4,000 a year (25% of £16,000) with no end date, plus a vote on big decisions. E retained profit: only £5,000, so £7,000 short. The van should last about 6 years and bring in about £500 a month.

Write about 80 words recommending ONE option (A, B, C, D or E) to Leah. Use at least two figures. Explain why its main advantage matters more than its main disadvantage, and why it is better than at least one other option.

Exit ticket

a. Name one source of finance of each type.

Type	Source of finance
Internal	
External	

b. A business borrows £8,000 at 6% a year. How much interest does it pay in one year? Show your working.