

Fuselage Design Profit Analysis Sheet

Name: _____

Date: _____

Period: _____

Key Formulas

Revenue = Number of passengers × Ticket price

Profit = Revenue – Operating Cost

Operating Cost per flight = \$28,000 (given by A+ Airways — includes fuel, crew, airport fees)

Step 1 — Your Seat Configuration

Your seat configuration (e.g. 3-3):	
Number of rows:	
Total number of seats:	
Seat class(es) offered (economy / business / first):	

Step 2 — Ticket Pricing

Directions

- Decide on a ticket price for each seat class you offer. Your prices should be realistic — look at what airlines actually charge for similar seat types to support your reasoning.
- Calculate Adjusted Revenue: Realistically, not every seat is filled every flight. Uncomfortable planes lose customers. If the practicality score for your seat configuration was 1 or 2, reduce your revenue to 80% of Full Capacity revenue. Otherwise, 90% of full capacity revenue is a good estimate.

Seat Class	Total # of Seats in Class	Ticket Price (\$)	Revenue (\$) (Full Capacity)	Adjusted Revenue (\$) (80-90% of Revenue)
Economy				
Business				
First Class				
TOTAL (Adjusted) REVENUE =				

Step 3 — Profit Calculation

Total Adjusted Revenue (from Step 2):	\$
Operating Cost (given):	\$ 28,000
Profit = Revenue – Operating Cost:	\$

Step 4 — Reflection

Is your airline profitable? If yes, by how much? If no, what would you change to become profitable?

You had to choose between more passengers (higher revenue) and more comfort (higher ticket prices). What choice did your design make, and why?

What data from your seating research (Sheet 2) and the seating experiment (Sheet 3) did you use to help make your design decisions?