

MANAGERIAL ACCOUNTING · CHAPTER 4 · COST ALLOCATION

Joint Ownership — Assessment

Work these on your own, then we'll go through them together on the screen.

Name _____

Date _____

Section _____

FIVE QUESTIONS

1 Which allocation base fits the cost?

Brightline Manufacturing performs maintenance on its production equipment after every **200 hours of machine use**. Which allocation base best links maintenance cost to what causes it? Circle one.

- ☐ (A) Square footage of the factory.
- ✓ ☒ (B) **Machine hours.**
- ☐ (C) Number of employees.
- ☐ (D) Sales revenue of each product line.

2 Match each shared cost to its best allocation base.

Hargrove Furniture allocates four shared costs to its two production departments. For each cost, write the **most defensible** allocation base.

Choose from: Square footage occupied · Number of employees · Machine hours run · Number of invoices processed · Sales revenue · Split equally among departments. *(Two of these are not the best fit for any cost.)*

SHARED COST	BEST ALLOCATION BASE
Building rent	Square footage occupied
Cafeteria services	Number of employees
Equipment maintenance	Machine hours run
Customer billing office	Number of invoices processed

3 Allocate the rent by square footage.

Kestrel Studios pays **\$96,000 a year** to rent its building. Two departments share it: **Design occupies 7,500 sq ft** and **Production occupies 4,500 sq ft**. Allocate the rent.

Total square footage	12,000	sq ft
Allocation rate per square foot	\$8.00	per sq ft
Design's share of the rent	\$60,000	
Production's share of the rent	\$36,000	

SHOW YOUR WORK

4 Now allocate the same rent by headcount.

Design's director proposes a change: allocate the **\$96,000** rent by **number of employees** instead. Design has **10 employees**; Production has **30**. This time, allocate using each department's **percentage** of total employees.

Total employees	40	people
Design's percentage of total employees	25%	
Production's percentage of total employees	75%	
Design's share of the rent	\$24,000	
Production's share of the rent	\$72,000	

SHOW YOUR WORK

5 Judge the proposal.

Should Kestrel adopt the Design director's employee-based proposal? Pick the strongest evaluation. Circle one.

- ☐ A Yes — headcount is simpler to track than square footage, and simpler is cheaper to administer.
- ☐ B Yes — departments with more people should carry more of the rent cost.
- ☒ C No — space occupied is what causes rent, not headcount — and the change happens to cut the proposer's own charge.
- ☐ D No — \$2,400 per employee is a much higher rate than \$8 per square foot, so the new method costs the company more overall.