

MANAGERIAL ACCOUNTING · CHAPTER 2 · COST BEHAVIOR

Pizza Ledger — Assessment

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

Name _____

Date _____

Section _____

SEVEN QUESTIONS

1 Fixed or variable — relative to what?

Each cost below is stated with the terms it is paid on. For each pairing, is the cost **fixed** or **variable** *relative to the activity named*?

COST, AND THE ACTIVITY IT'S MEASURED AGAINST	FIXED OR VARIABLE
Ferry captain paid \$300 per crossing, relative to crossings made	Variable
Ferry captain paid \$300 per crossing, relative to cars carried	Fixed
Wedding photographer paid \$1,200 per wedding, relative to guests attending	Fixed
Wedding photographer paid \$1,200 per wedding, relative to weddings shot	Variable
Exam proctor paid \$50 per exam session, relative to students sitting the exam	Fixed
Exam proctor paid \$50 per exam session, relative to sessions proctored	Variable
Moving crew paid \$500 per move, relative to boxes carried	Fixed
Moving crew paid \$500 per move, relative to moves completed	Variable

2 Cedar Creek's costs: fixed or variable?

Cedar Creek Car Wash sold **5,000 washes in April at \$12** each. Relative to **washes sold**, mark each cost fixed or variable.

COST	FIXED OR VARIABLE
Soap and wax, \$0.60 per wash	Variable
Manager's salary, \$4,000 a month	Fixed
Lot lease, \$3,000 a month	Fixed
Attendants' pay, \$1.50 per wash	Variable
Card processing fees, 2.5% of each sale	Variable
Insurance, \$600 a month	Fixed
Water, metered, \$0.40 per wash	Variable
Equipment lease, \$1,200 a month	Fixed

3 As volume rises, what happens to each figure?

Cedar Creek expects **8,000 washes in May**, up from 5,000. For each figure, mark whether it rises, falls, or stays the same.

Choose from: Rises · Falls · Stays the same.

FIGURE	AS VOLUME RISES
Total fixed cost	Stays the same
Fixed cost per wash	Falls
Total variable cost	Rises
Variable cost per wash	Stays the same

4 April, in contribution format.

Build Cedar Creek's **April contribution-format income statement**. **5,000 washes at \$12** each. Enter every figure as a positive amount.

Costs: soap and wax \$0.60/wash · manager's salary \$4,000/mo · lot lease \$3,000/mo · attendants' pay \$1.50/wash · card fees 2.5% of each sale · insurance \$600/mo · water \$0.40/wash · equipment lease \$1,200/mo.

Revenue

\$60,000

Total variable costs

\$14,000

Contribution margin

\$46,000

Total fixed costs

\$8,800

Net income

\$37,200

SHOW YOUR WORK

5 May, on the same structure.

May came in at **8,000 washes**, 60% more than April. **Same \$12 price and the same costs as Q4**. April's net income was **\$37,200**. Work May's result.

Contribution margin per wash

\$9.20

per wash

May contribution margin

\$73,600

May net income

\$64,800

Percent change in net income, April to May

74.2%

SHOW YOUR WORK

6 Same revenue, different structure. Circle one.

Two car washes are identical in every respect but one: **Ridge Wash** pays its attendants a **monthly salary**; **Valley Wash** pays its attendants **per wash**. In April they had the same revenue and the same net income. In May, volume falls 20% at both. Which is true?

- ✓ **A Ridge Wash's net income falls by more.**
- B** Valley Wash's net income falls by more.
- C** Both fall by the same amount, since revenue and income were identical.
- D** Ridge Wash's net income does not fall, since its attendant cost does not change.

7 Per-wash pay or a salaried crew?

Cedar Creek could replace per-wash attendant pay (**\$1.50 per wash**) with a **salaried crew at \$9,600 a month**. At each volume, which costs less?

Choose from: Salaried crew · Per-wash pay · They cost the same.

MONTHLY VOLUME	WHICH COSTS LESS
4,000 washes a month	Per-wash pay
6,400 washes a month	They cost the same
8,000 washes a month	Salaried crew