

# 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              |                   |
| Ferry captain paid \$300 per crossing, relative to cars carried                |                   |
| Wedding photographer paid \$1,200 per wedding, relative to guests attending    |                   |
| Wedding photographer paid \$1,200 per wedding, relative to weddings shot       |                   |
| Exam proctor paid \$50 per exam session, relative to students sitting the exam |                   |
| Exam proctor paid \$50 per exam session, relative to sessions proctored        |                   |
| Moving crew paid \$500 per move, relative to boxes carried                     |                   |
| Moving crew paid \$500 per move, relative to moves completed                   |                   |

### 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           |                   |
| Manager's salary, \$4,000 a month       |                   |
| Lot lease, \$3,000 a month              |                   |
| Attendants' pay, \$1.50 per wash        |                   |
| Card processing fees, 2.5% of each sale |                   |
| Insurance, \$600 a month                |                   |
| Water, metered, \$0.40 per wash         |                   |
| Equipment lease, \$1,200 a month        |                   |

### 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       |                 |
| Fixed cost per wash    |                 |
| Total variable cost    |                 |
| Variable cost per wash |                 |

### 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

Total variable costs

Contribution margin

Total fixed costs

Net income

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

 per wash

May contribution margin

May net income

Percent change in net income, April to May

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**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 |                  |
| 6,400 washes a month |                  |
| 8,000 washes a month |                  |