

Bread & Bloom Bakery — Assessment

Northline Print Co. · seven questions

Northline Print Co. runs three lines out of one building: Business Printing, Signs & Banners, and Custom Apparel. Shop rent is \$9,200 a month. All figures are monthly. Four decisions are on the counter, and the numbers on each one are not all worth the same.

1. Does this number get a vote?

8 ITEMS

A decision is on the table in each line below. Mark whether the figure is relevant to **that** decision.

THE DECISION	THE FIGURE	RELEVANT	NOT RELEVANT
Drop a class you have already paid for	The \$400 nonrefundable tuition already paid	☐	☐
Drive to a conference or fly	Gas and tolls for the drive, \$180	☐	☐
Drive to a conference or fly	The car’s annual insurance premium, \$1,320	☐	☐
Work Saturday or go to a friend’s wedding	The \$190 of Saturday wages given up by not working	☐	☐
A contractor takes a repaint job or turns it down	Paint bought for a cancelled job that fits this one, cannot be returned and has no other use, \$310	☐	☐
A shop adds a second delivery van or does not	The \$700 a month lease on the second van	☐	☐
A landscaper takes a rush job or turns it down	The overtime premium the rush job forces, \$460	☐	☐
A hospital closes its gift shop or keeps it	The shop’s \$2,400 monthly share of hospital administration, which will still be spent after the shop closes	☐	☐

2. The event order

4 CELLS

Northline’s Custom Apparel line prints 2,200 shirts a month and its presses can handle 3,000. A road race offers **\$9.00 each for 600 event shirts**. Northline’s regular price is \$16.00, and its accountant puts the cost of a shirt at **\$12.50**: blank shirts \$4.20, ink and supplies \$1.10, hourly press operator \$1.70, and \$5.50 of shop overhead spread across every shirt the presses run. The order also needs a **one-time screen setup, \$240**. Enter every figure as a positive amount.

Revenue from the order	_____
Costs that rise because these 600 shirts are printed (setup not included)	_____
One-time costs the order causes	_____
Increase in Northline’s monthly income if it takes the order	_____

3. The same order, with the presses full

MULTIPLE CHOICE

Same order, one change: Northline's presses are already running all 3,000 shirts a month. Printing the 600 event shirts means printing 600 fewer regular shirts, which sell at \$16.00 and carry the same \$7.00 of costs that rise. What should Northline do?

- a) Take it. Income rises \$960, the same as before; the shirts still cover the costs they cause.
- b) Turn it down. Income would fall \$4,440.
- c) Turn it down. Income would fall \$5,400.
- d) Turn it down. At \$9.00 the order is below the \$12.50 it costs to make a shirt.

4. Panels: make them or buy them

3 CELLS

Northline's sign line uses **1,500 mounting panels a month** and cuts them itself. A supplier offers finished panels at **\$6.15 each**. Northline's accountant puts the cost of cutting one at **\$7.10**: board stock \$3.30, cutting-room labor \$1.85, power for the cutter \$0.25, depreciation on the cutter (bought three years ago, no resale value) \$0.60, and a \$1.10 share of shop rent and the plant manager's salary. The cutting-room crew works elsewhere in the shop if the cutter goes quiet, and the space stays Northline's either way. Enter every figure as a positive amount.

Monthly cost of making 1,500 panels, counting only what would stop being spent _____

Monthly cost of buying 1,500 panels _____

How much cheaper the better choice is, per month _____

5. The line the report calls a loser

3 CELLS

Northline's monthly report shows **Signs & Banners losing \$3,600**: sales \$24,000, less \$16,200 of costs that rise and fall with sign volume, less \$6,900 of costs belonging to the line alone (its equipment lease and the sign designer's salary, all of which stop if the line closes), less a \$4,500 share of shop rent, the plant manager and the office, a share the shop keeps paying if the line closes. A frame shop next door will rent the floor space for **\$1,400 a month** if it comes free. Enter every figure as a positive amount.

What Signs & Banners actually brings in beyond the costs that would disappear with it _____

Monthly amount Northline would gain that it does not get today if the line closes _____

Increase in Northline's monthly income if it closes the line and rents the space out _____

6. Replace the laminator?

8 ITEMS

Northline's six-year-old laminator still runs. A new one would cost **\$14,500** and last five years. For each figure, mark whether it is relevant to the replace-or-keep decision.

THE FIGURE	RELEVANT	NOT RELEVANT
The \$18,000 Northline paid for the old laminator six years ago	☐	☐
The \$14,500 price of the new laminator	☐	☐
The old laminator's remaining book value, \$3,000	☐	☐
Supplies and repairs to run the old laminator, \$640 a month	☐	☐
Depreciation still to be recorded on the old laminator, \$250 a month	☐	☐
The \$1,100 the dealer will pay today for the old laminator	☐	☐
Supplies and repairs to run the new laminator, \$410 a month	☐	☐
Northline's shop rent, \$9,200 a month	☐	☐

7. How much would it have to be?

MULTIPLE CHOICE

Closing Signs & Banners leaves Northline **\$500 a month better off**. But the sign line's walk-in customers often order business printing on the same visit, and nobody tracks how many. A business printing job averages **\$50**, with **\$25** of costs that rise with the work. How many of those jobs a month would have to disappear along with the sign line before closing it stops paying?

- a) About 10 jobs a month.
- b) About 20 jobs a month.
- c) About 36 jobs a month.
- d) You cannot put a number on it. It is a qualitative factor, so it has to be judged rather than calculated.