

Name: \_\_\_\_\_ Date: \_\_\_\_\_

### 4.3 Operating a Small business

1. List some expenses for each business and classify each as fixed or variable.

a) paving company

b) craft store

c) limousine business

d) hot dog vendor

2. The table shows the revenue for a business over a five-year period.

Year	Revenue
1	\$15 000
2	\$21 000
3	\$42 000
4	\$68 000
5	\$55 000

a) Graph the revenue from year 1 to year 5.

b) Is this a linear relation? Why or why not?

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**BLM 4.3**  
(continued)

3. Miranda runs a small yoga studio. Her annual revenue and expenses for the past three years are shown.

Year	Revenue	Expenses
1	\$12 625	\$6025
2	\$15 775	\$8618
3	\$13 125	\$7427

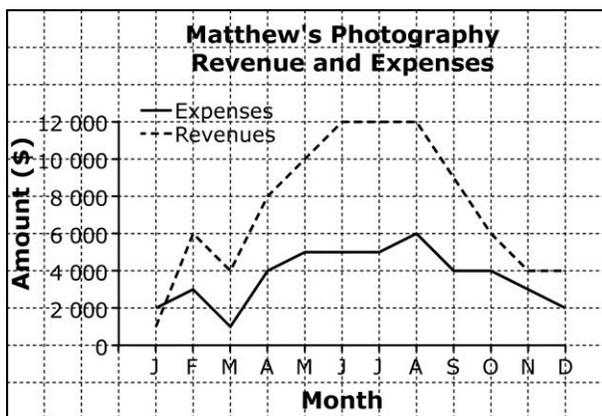
During which year did Miranda have the largest profit? How much was her profit for that year?

4. The table shows the revenue and expenses for a business. Graph the revenue and expenses on the same grid.

Month	Revenue	Expenses
January	\$1500	\$2100
February	\$1200	\$2200
March	\$1800	\$2000
April	\$2000	\$2500
May	\$2500	\$2400
June	\$2600	\$2500
July	\$3500	\$2600
August	\$3800	\$2600
September	\$2400	\$2200
October	\$2300	\$2000
November	\$2600	\$2200
December	\$4000	\$2800

5. A business had an annual revenue of \$105 682.48. If the annual expenses were \$48 761.52, did the company experience a profit or loss for that year? How much?

6. Matthew is a wedding photographer who runs a business from his home. The graph shows his revenue and expenses for the year.



- a) During which month(s) was Matthew's revenue the highest? What might be the reason for this?
- b) During which month(s) was Matthew's revenue the lowest? expenses the highest? expenses the lowest?
- b) Was there any month in which Matthew's revenue was lower than his expenses? If so, when?

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**BLM 4.3**  
(continued)

- 7. a)** A business had an annual net income of \$56 127.42. If the annual expenses were \$18 415.23, what was the revenue for the year?
- c)** Last year, a business experienced a loss of \$3508.14. If the revenue was \$67 418.21, what were the expenses for the year?
- 8.** A coffee shop pays \$29 400 annually for rent. If the total annual expenses are \$52 451.50, what percent of the total expense is the rent?
- 9.** Brent started a lawn care business three years ago. He originally operated it out of his home. This year he decides to expand the business and rent office space. The rent is \$1300 a month. Brent pays the rent in advance for three months. New office furniture and fixtures cost \$12 800. Brent also purchases other merchandise for \$18 500. Additional miscellaneous expenses total \$1920.
- a)** What is the total cost for Brent to expand his business?
- b)** Do you think Brent's business will generate a profit this month? Explain.