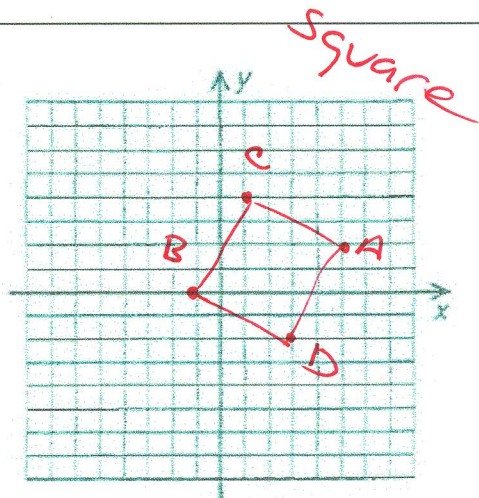
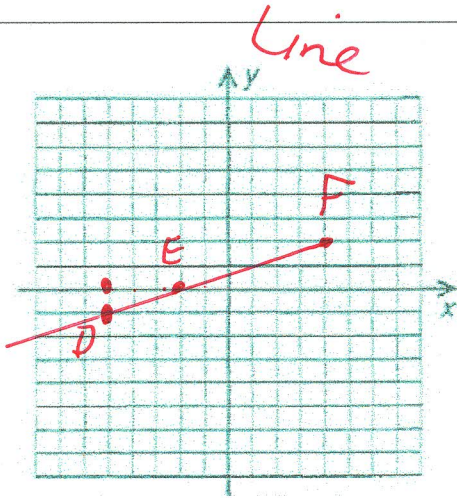


Review Package
Lessons 1 - 4

1. Plot the following points on a Cartesian plane and describe what they form.

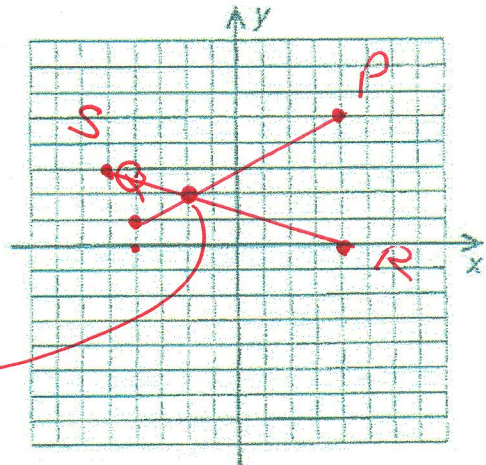
a) D(-5, -1), E(-2, 0), F(4, 2).

b) A(5, 2), B(-1, 0), C(1, 4) D(3, -2)



2. a) On Cartesian plane, draw lines that pass through the following points:

- 1) Q(-4, 1) and P(4, 5):
- 2) R(4, 0) and S(-5, 3).



b) Find the coordinates of the point of intersection of these two lines.

(-2, 2)

3. In each of the situations, indicate whether the variables vary in the same direction or in the opposite direction.

a) We are interested in the relation between the number of hours worked by people and their salary.

Variation in the same direction



Variation in the ~~same~~ direction

opposite



b) We are interested in the relation between the number of rooms to be painted in a house and the time needed to paint them.

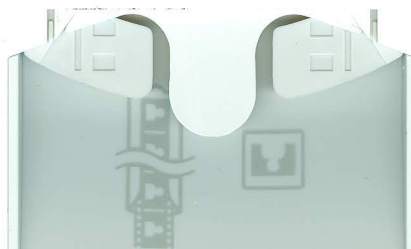


c) We are interested in the relation between the car's model year and its value.

Incr. Decr.



Depends "antigos"

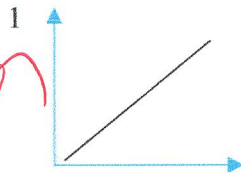


4.

Associate each table of values with the corresponding graph.

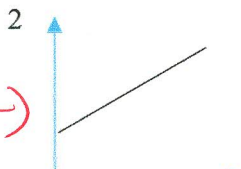
A

x	1	2	3	5	8
y	7	6	5	3	0



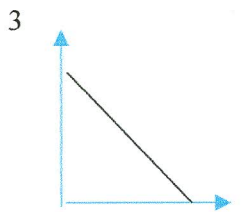
B

x	1	2	3	5	10
y	6	8	10	14	24



C

x	0	1	2	5	10
y	0	4	8	20	40



5. Rachel is 7 years younger than her sister Linda.

a) Complete the table of values below and find the general rule.

Rachel's Age	1	2	3	4	5	6	7	---	x	---
Linda's Age	8	9	10	11	12	13	14	---	x+7	---

b) What is Linda's age if Rachel is 24 years old?

$$24 + 7 = 31$$

c) If Rachel is presently 11 years old, in how many years will Linda be 30 years old?

Rachel 11

$$\text{Linda } 11 + 7 = 18$$

In 12 years to turn 30.



6. In the company where Jill works, a forewoman is usually responsible for 12 junior employees.

a) Complete the following table of values.

Number of forewoman	1	2	3	4	5	7	8	---	x	---
Number of junior employees	12	24	36	48	60	84	96	---	$x(12)$	---

12x

b) How many junior employees are there in the company if there are 14 forewomen?

$14 \times 12 = 168$ Employees

c) How many forewomen are needed to supervise 216 junior employees?

$216 \div 12 = 18$ forewomen

7. **Fierce Competition**

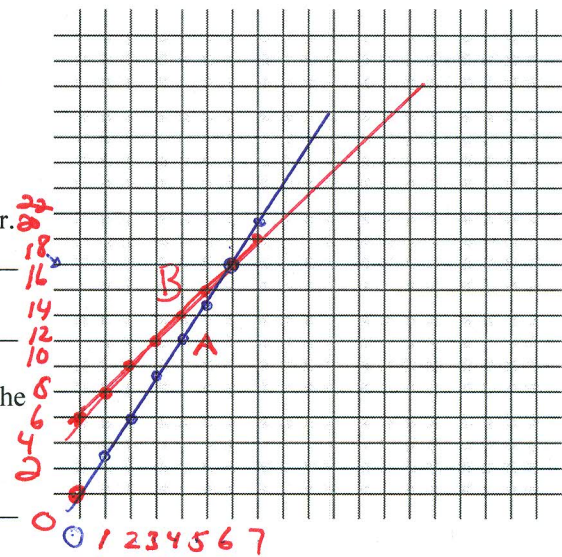
The owners of two commercial parking lots in the city of Montréal are competing against each other. The owner parking lot A wants \$ 3.00 for each hour of parking. The owner of parking lot B charges a \$ 6.00 entrance fee and wants \$ 2.00 for each hour of use.

a) Fill in the table of values below:

Parking lot prices

Time (h)	0	1	2	3	4	5	6	7	n
Prices of parking lot A (\$)		3	6	9	12	15	18	21	3n
Prices of parking lot B (\$)	6	8	10	12	14	16	18	20	2n + 6

b) Use the Cartesian plane on the right to represent the prices of each parking lot. Associate parking time with abscissa axis and total parking price with the ordinate axis.



c) Where is it least expensive to park? Explain your answer.

A till after 7 hours
 A+B are the same at 6 hours.

d) For each parking lot, determine the rule for calculating the Total price p according to parking time t.

A $3n$

B $2n + 6$

n = # of hours.