Exercice 1 :

Read the two following situations.

For each situation, decide if it represents a **proportional relationship**.

Explain why or why not, and identify the **constant of proportionality** if it exists.

Situation A: A bicycle rental company charges a fixed $5 per hour. If Maria rents a bike for 2 hours, she pays $10. If she rents it for 6 hours, she pays $30.

Situation B: A taxi company charges a base fare of $3 plus $2 per kilometer. If John travels 1 km, he pays $5. If he travels 3 km, he pays $9.

Exercice 2 :

For each table below, calculate the ratio for each columns.

Check if the ratios are equal.

Then determine which table represents a **proportional relationship**.

Explain your answer.

Table 1:

Quantity A	2	4	6
Quantity B	4	8	12

Table 2:

Quantity A	1	2	3
Quantity B	3	6	10

Exercice 3 :

Use the **cross product method** to complete the following tables. Show your calculations.

(a)

Quantity A	2	4
Quantity B	3	?

(c)

Quantity A	5	15
Quantity B	10	?

(b)

Quantity A	4	?
Quantity B	12	6

(d)

Quantity A	?	12
Quantity B	24	36

Exercice 4 : *(Listening comprehension – Shopping.)*

Instructions: Listen carefully to the dialogue. Then answer the questions.

Transcript (to be read by the teacher):

Shopkeeper: Good morning. Can I help you?

Customer: Yes, please. How much are the apples?

Shopkeeper: They are 2 euros per kilogram.

Customer: Okay. And how much are the oranges?

Shopkeeper: The oranges are 3 euros for 2 kilograms.

Customer: I would like 3 kilograms of apples and 4 kilograms of oranges, please.

Shopkeeper: No problem. So, 3 kilograms of apples cost 6 euros, and 4 kilograms of oranges cost 6 euros. The total is 12 euros.

Customer: Here is a 20-euro note.

Shopkeeper: Thank you. Your change is 8 euros.

Customer: Thank you. Have a nice day.

Shopkeeper: You're welcome. Goodbye.

Key Words : price, per, kilogram, cost, total, change, euros, buy, pay

Part 1 – Listening comprehension (vocabulary)

1. What fruits does the customer buy?

2. What is the **price** of apples **per** kilogram?

3. What is the **price** of oranges for 2 kilograms?

4. What does the word **change** mean in French?

Part 2 – Maths (proportionality)

5. Complete the **table of proportionality** for apples.

Quantity (kg)	1	3
Price (€)	?	?

6. How much does the customer pay in total? Write a **full sentence** in English.

7. The customer gives a 20-euro note. How much **change** does he get? Write a **full sentence** in English.

8. If the customer had 20 euros, how many kilograms of apples could he buy? Show your calculations.