Numeracy in practice teaching and learning examples



CONDOMINIUM EXPENSES

Understanding shared costs

Condominium homeowners are responsible not only for their personal utility costs—such as water, gas, and electricity—but also for shared condominium expenses. These shared costs include utilities for common areas, elevator maintenance (if applicable), and payments for cleaning or landscaping services. To fairly distribute these expenses, a system called the "thousandth" is used, which assigns a value to each unit based on its size or other factors, ensuring that costs are allocated proportionally among residents.

Overview "CONDOMINIUM EXPENSES"

Context

Finances Citizenship Everyday life

Content

Quantity and number Relationships Using a calculator How are condominium expenses calculated?

Target group (incl. necessary prior skills and competences)

Adults and young adults who have basic knowledge of mathematics; curious about issues related to the management of expenditure.

Outcomes and results

Learners will know the concept of thousandths and will be able to allocate expenses according to this criterion.

Cognitive processes

Managing situations
Mathematising

DispositionsFlexibility





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Main information						
Content	Quantity and number; Direct proportionality; Using a calculator.					
Target group	Adults and young adults who have basic knowledge of mathematics; they know how to do proportions and what is meant by "direct proportionality". Learners are also curious about issues related to the management of expenditure.					
Learning intention	Numeracy for personal and private purposes					
Duration	Approx. 2 hours.					
Material and resources	Slides examples of condominium expenses.					
Group size	Range from 4 to 10 learners					
Problem statement	The management of condominium expenses (i.e. utilities related to the common parts) takes place using the system of thousandths. In this way each condominium will pay its share in proportion to the property owned. Let's find out together how this system works.					
Working questions	 What is meant by condominium expenses? How are they divided? How do you make the calculation? Would you be able to check/check if the amount proposed by the administrator is correct? 					



Learning outcomes and results

Learners will know the concept of thousandths and will be able to allocate expenses according to this criterion.



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Working plan

Time (lessons)	Description of content/activities	Material	Methodical and didactic information ¹
30'+	1. Discover At this stage the first questions are asked among the "Working Questions" in order to guide a lesson, which is as active as possible. The types of condominium expenses are treated, at the discretion of the teacher more or less in detail, but above all how the division of these expenses works (thousandth).	Slides	Questioning Active learning [explicit teaching]
45'+	2. Expense Calculation Once the concept of "thousandth" is addressed, learners, who should have a previous knowledge about the proportions, are asked how is the calculation to determine the expenditure of each condominium. Then exercises are assigned (see "Appendix"). This activity is carried out in pairs. This phase ends with the correction and revision of the exercises.	Examples of condominium expenses	Hands on learning Collaborative learning
30′	3.Discussion Learners share the main aspects learned during the activity.		Feedback

¹ for description and explanation of kinds of tasks, HITs and other background information please consult the teacher's/user's guide





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Appendix

1.DISCOVER

https://www.altalex.com/guide/tabelle-millesimali

https://digilander.libero.it/gianfurdi0/tabmillesimi.html

https://biblus.acca.it/tabelle-millesimali/

2.EXPENSE CALCULATION

AN EXAMPLE OF EXERCISE:

" CONSIDERING THE SITUATION OF THE CONDOMINIUM PICTURE, CALCULATE THE AMOUNT

				Con	domii	nio Via T	iburtina						
					Tab	elle B-	E						
Immobile	Propietà	Tabella A	Tabella B Millesimi scale						Tabella E Millesimi colonne scarichi acque chiare e acque scure				
		Propietà generale	50% millesimi propietà - a -	Superficie virtuale		Altezza dalla quota ingresso (0,00)	50% millesimi altezza - b -	Millesimi scale Totali a + b	Superficie reale	Acque chiare		Acque scure	
		generale								Dx	Sx	Dx	Sx
Appartamento int.1 (Piano terra)	Bianchi	131,45	68,39	51,01	99.57	0,70	7,88	76,27	66,11	344,68		344,68	
Appartamento int.2 (Piano terra)	Rossi	125,14	65,11	48,56	00,07		7,50	72,61	66,11	127	240,74	- 4	240,74
Appartamento int.3 (Piano primo)	Esposito	142,32	74,05	55,23	108.82	3,82 4,00	44,62	118,67	66,23	345,31		345,31	*
Appartamento int.4 (piano primo)	Di Giovanni	138,10	71,85	53,59	100,02		43,29	115,14	67,22		244,78		244,78
Appartamento int.5 (Piano secondo)	Bruni	123,59	64,30	47,96	99,72	7,35	77,69	141,99	59,46	310,01		310,01	
Appartamento int.6 (Piano secondo)	Stoppa	133,38	69,40	51,76			83,85	153,24	67,65		246,35		246,35
Appartamento int./ (Piano terzo)	Tiberi	167,02	86,90	64,82	64,82	10,70	235,16	322,07	73,63		268,13		268,13
Cantina n.1		1,23	72					- 2	5,40			1	
Cantina n.2		2,11							9,24				
Box auto interrato		20,92							61,03			-	
Box auto esterno		14,73							17,86				
Totali		1000,00	500,00	37	2,94	22,75	500,00	1000,00	559,94	1000,00	1000,00	1000,00	1000,00

EACH OWNER SHOULD PAY IF THE TOTAL IS EUR 14,500."







This material was produced in the Erasmusplus project **Numeracy in Practice**, projectnumber 2021-1-NL01-KA220-ADU-000 026 292. In this project, 11 partners in 11 countries worked together in designing, evaluating and improving the materials. All materials can be found on the website (www.cenf.eu).





















