

## Exercise 04

### Between Calculations and Castles (A): Capitalization

Joana Lanterna stood at the window of her solicitor's office in Sintra, her eyes fixed on the whimsical silhouette of the Pena Palace perched atop the nearby steep hill. The vibrant yellows and reds of the palace seemed to glow in the late afternoon sun, in stark contrast to the sea of paperwork spread across her desk.

As a solicitor specializing in real estate law, Joana had seen her fair share of rental disputes, but this latest case promised to be uncontroversial. Her client, Arantes Cerejeira, a long-time landlord in the area, was seeking to update the rent for 2025 on a property that had been in his hands for over two decades. The rent had last been updated in 2021 and had remained constant at EUR 920 from then until now (October 2024).

She sighed, turning to her desk and the calculator waiting for her. Joana had already obtained the data she needed, which was handwritten on a sheet of paper on her desk:

		<i>Rent</i>
		<i>Adjustment</i>
<i>Year</i>	<i>Rate of change</i>	<i>Coefficient</i>
2025	2.16%	1.02160
2024	6.94%	1.06940
2023	2.00%	1.02000
2022	0.43%	1.00430

As she began to make the calculations, Joana found her gaze drifting back to the Pena Palace. Its eclectic architecture, a mix of different styles and eras, reminded her of the delicate balance she needed to achieve in her work. Just as the palace harmoniously combined seemingly disparate elements, she would need to find a way to harmonize her creative spirit with analytical skills, negotiation talent, attention to detail, and, not least, financial calculation competencies.

With renewed focus, Joana returned to her calculations. The colorful palace outside her window served as a reminder that, even in the world of contracts and clauses, there was room for creativity and balance. But not this time. Joana finished her calculations. As the sun began to set, casting long shadows across her office, Joana began to reflect on the task that would occupy her in the coming days. A more interesting, controversial, and complex case that would require excellent judgment but also sophistication and financial precision. As she left the office, Joana was determined to design and build a solution for this new legal and financial case that would be as inspired as the timeless landmark that watched over Sintra. [Continuation: [Between Calculations and Castles \(B\)](#)]

What was the value of the new rent for 2025 that Joana calculated?

A: EUR 1,029.61.