



VISIT MATH



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Itinerary



- 1 The belfry
- 2 The gardens
- 3 The walls
- 4 The dome
- 5 The Mariette monument

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VisitMath Tours BOULOGNE



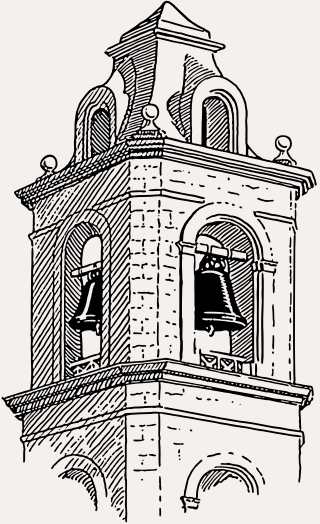
FERMAT SCIENCE
Une autre idée des maths



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Before the tour: what to consider before visiting the old town and material to bring



The old town in Boulogne-Sur-Mer is paved, but people in a wheelchair can still access it. The Mariette monument is easily accessible too. However, since Boulogne is a seaside city, some of the roads are rather steep.



If you decide to do this tour between July and October, the second step of this tour might be harder to visualize since the “Ephemeral garden” event is taking place. Be sure to check this out, this event has a new theme every year!



You will need a protractor for the first step of this tour. You may also use a calculator for the most difficult operations you will encounter.



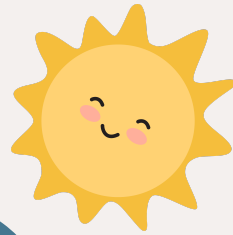
Are you ready? Off we go!

Ahoy, matey! I mean, erm, hello! I’m Timmy, I am a fierce sailor and I often travel to this part of the world! Visiting Boulogne without the insight from a sailor would be a shame, wouldn’t it? Let me show you around!



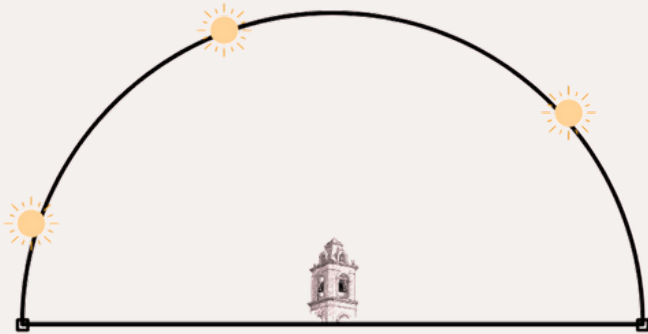
Step 1: The belfry of the rebel city





Boulogne-Sur-Mer was built by the Romans and often fought against the authority of the French kings in the 12th and 13th centuries. In the 17th and 18th centuries, the city faced the attacks of the British. Finally, in the 20th century, it survived the German bombing during the Second World War. Today, only one remaining building has witnessed all of those conflicts: the belfry!

The belfry was used as a clock tower to tell people what time it was. It would usually ring at 9:00 for the start of the day, at 12:00 for lunch and at 17:00 for the end of the day. It rings whenever the sun is in the following positions:



Are the timings accurate? How could you explain any difference you may find?



Toolbox:

Think about where the observations are made from: the top of the tower, or the straight bottom line?
Use your protractor to calculate the angles!

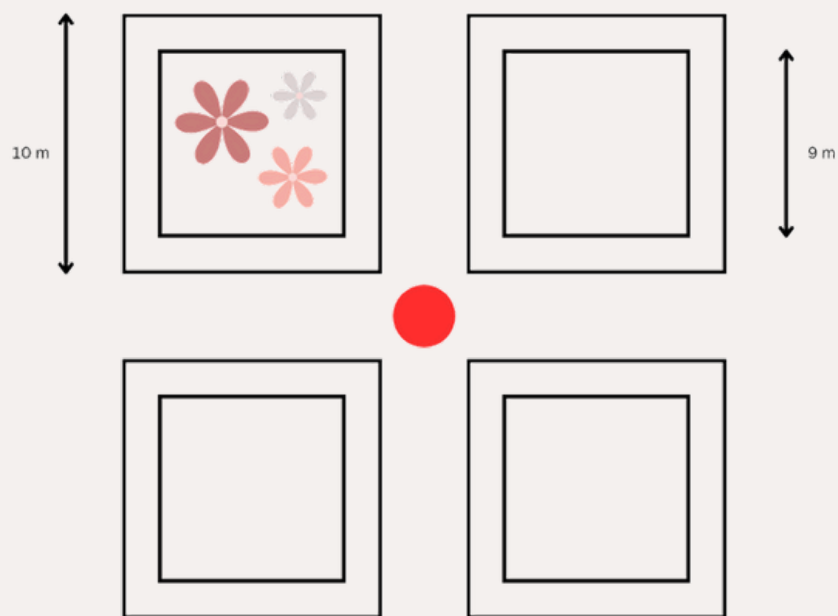
Sadly, the belfry is not visible from the sea shore, even with a good lens... Unless you are able to fly! Can you fly?



Your next destination is the front of the city hall. Can you find it from where you stand?

Step 2: The City Hall gardens

The gardens in front of the town hall offer a nice sight to tourists and inhabitants alike. The flowerbeds can be represented as follows:



Explanation:

Each flowerbed is a square. The outer squares have 10m sides, while the inner squares have 9m sides. Only the inner squares have flowers in them: the gap stands for the border of the flowerbed. Indicate the perimeter and area of the border.



This year, the city council have decided to create a symmetrical garden. They have added the first flowers to one of the squares. Add the next ones to the garden!



Each year, an “Ephemeral gardens” event is held on this very spot in the summer. The flowerbeds are rearranged to fit a specific theme, which changes every year!



Those gardens are so nice! I have seen some of them, and I still have many more to discover!



Are you ready for the next step? Walk up the Rue Godefroy de Bouillon and Rue de Lille to reach the ramparts of the city. You'll have a nice view from up there!

Step 3: A walk on the walls

The walls surround the old fort that once dominated the city. As you walk, you will notice several gorgeous places, some above and some beneath you. And, guess what? You will be able to have a closer look at some of them in the next steps.

For now, let's see where you can go from up the walls.



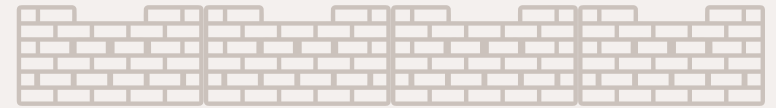
Try not to fall from the walls! I think I almost did, once. I was little, so I don't remember!



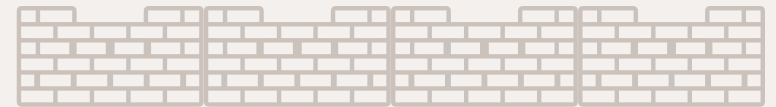
Reading the map:

The city walls are highlighted in red. The starting points (A, B and C) are located on the walls.

Although the tour will not go to point D, you should take some time to get there - after all, it's the fish market in a fisherman's city!



Your goal is to reach point D the fastest. You have three options from the walls. Option A is to take a car from point A. You can drive at 20km/h, but you have to stop whenever you encounter a blue square for a minute each time.



Option B is to walk from point B. You walk at 5km/h, and nothing can stop you! Option C is to take your bike from point C. You can cycle at 15km/h but you have to stop for 10 seconds every time you change streets.



The city of Boulogne-sur-Mer has benefitted from the access to the sea for centuries. Today, the sea is still a big part of its economy: although the harbour is not as active as it used to be, the city hosts one of the biggest sea museums in Europe.



Is it worth it?

What was the fastest way to reach point D? Did you gain that much time compared to the other options? Talk about it with your teacher and classmates!

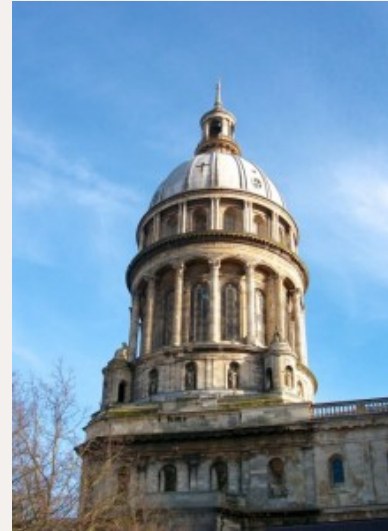


Wherever you are standing, you should notice a big building inside the city walls... the cathedral, of course! Stay on the ramparts to take a closer look at the dome.



Erm, I think I can hear my dad coming... Quick, let's finish this tour before he arrives!

Step 4: The dome of the cathedral



Espacegraphique



From the height of the walls, you may see the dome of the Boulogne Cathedral. This basilica was made in the neoclassical architecture style and dates back to the mid-19th century.



The dome is 47m wide.
There are 16 windows in total.

Each column between the windows is 1 meter wide. Estimate the width of the windows.



Knowing that the width of each pane is half their height, what is the height of the dome's bottom windows?

Tips for later:

You can also have a look at the dome windows from inside the Cathedral. This way, you will also discover the statues that stand below each window.

Don't hesitate to visit the crypt after the tour if you're interested too!

Hello kid! I have been looking for you! Oh, you're on a tour? Well, let me take care of the last step.



Watch out for pyramids and dugouts from the top of the walls! Once you've noticed them, walk down the stairs.

Step 5: A trace of Egypt in the north of France



The Mariette monument, which you will find below the walls, was built as a homage to archaeologist Auguste Mariette. He became famous as he discovered the Saqqara pyramids in Egypt and fought to stop the Europeans from pillaging African heritage.



Wikipedia

This small park was built in 2004 and re-built in 2021, so let's hope that the structure of the square does not change too much as you complete this tour. Whatever you look at, it will always be a nice sight!

A bit of information about the site:

The replica of the Saqqara pyramid is right behind the Mariette statue, which stands on top of a more "traditional" pyramid. This replica is made of square-base rectangular cuboids.



The base has 4m sides, and each step is 25cm wide. What is the perimeter and area of the top square? Represent each cuboid as a fraction of the previous one.



Mariette was a good guy, he was in favour of returning the archaeological items to the countries they belonged. All the statues you can find here are replicas!

It was nice having you around, but I must sail back now. I hope you enjoyed the visit! Let's get started now Timmy!

