

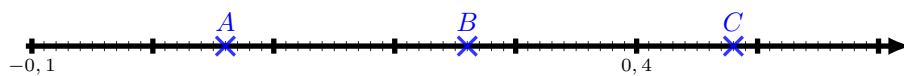
Table des matières

1	Algèbre	2
1.1	Droites des réels	2
1.2	Ensemble de nombres	2
1.3	Nombres complexes	2
2	Analyse	3
2.1	Fonctions affines	3
2.2	Fonctions (dé)croissantes	3
2.3	Fonctions diverses	3
2.3.1	Résolution graphique	3
2.3.2	Comparaison de fonctions	4
2.3.3	Fonctions sinusoidales	4
2.3.4	Etude de limites	5
2.3.5	Une exponentielle croissante majorée	5
2.3.6	Intégrales	5
3	Statistiques & Probabilités	7
3.1	Arbre de probabilités	7
3.2	Diagrammes bâtons	7
3.3	Histogrammes	8
3.4	Diagrammes divers	8
4	Géométrie	8
4.1	Figures dans le plan	8
4.1.1	Les grands classiques	8
4.1.2	Figures particulières	9
4.2	Figures dans l'espace	10
4.2.1	Les grands classiques	10
4.2.2	Figures particulières	11
4.3	Cercle trigonométrique	13
4.3.1	Le cercle	13
4.3.2	Sinus et cosinus	13
4.3.3	Valeurs remarquables	14
5	Informatique	15
5.1	Algorithme	15
5.2	Méthodes numériques	15
5.2.1	Dichotomie	15
5.2.2	Méthode de Newton	16
5.2.3	Méthode de la sécante	16
5.2.4	Méthode des rectangles	16
5.2.5	Méthode des trapèzes	17
5.2.6	Méthode de Simpson	17

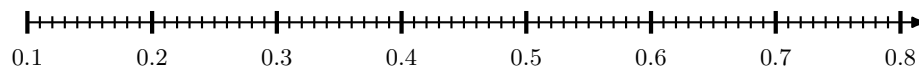
1 Algèbre

1.1 Droites des réels

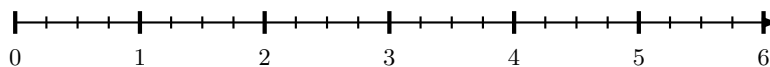
- Une première droite :



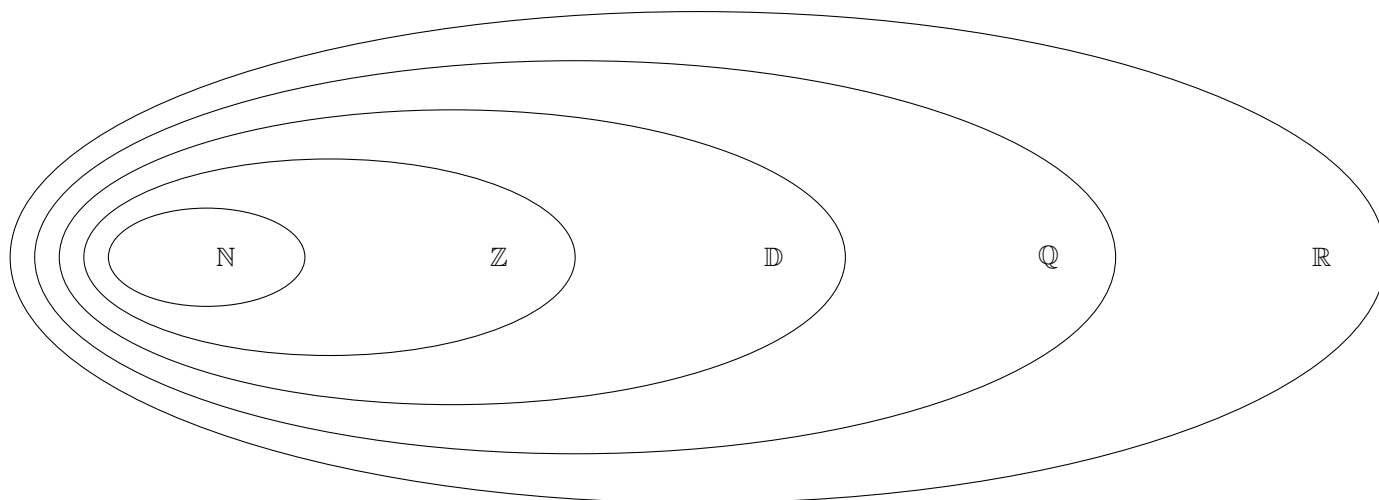
- Une deuxième droite :



- Une troisième droite :

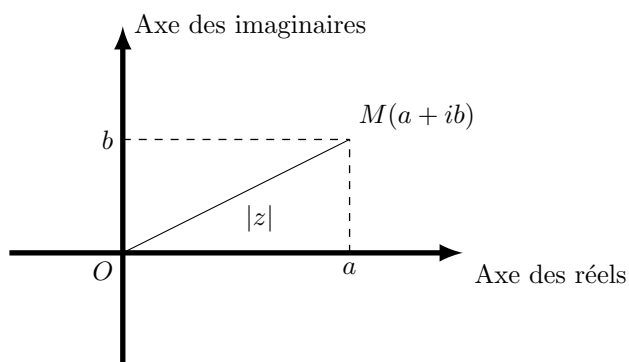


1.2 Ensemble de nombres

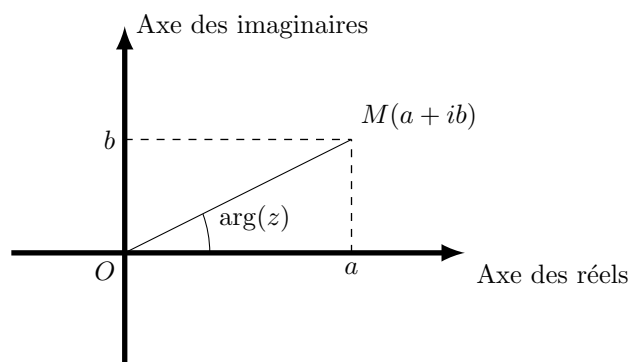


1.3 Nombres complexes

- Le module :



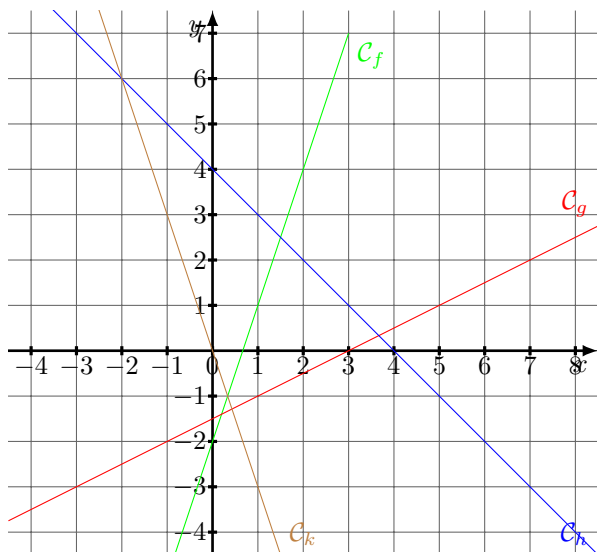
- L'argument :



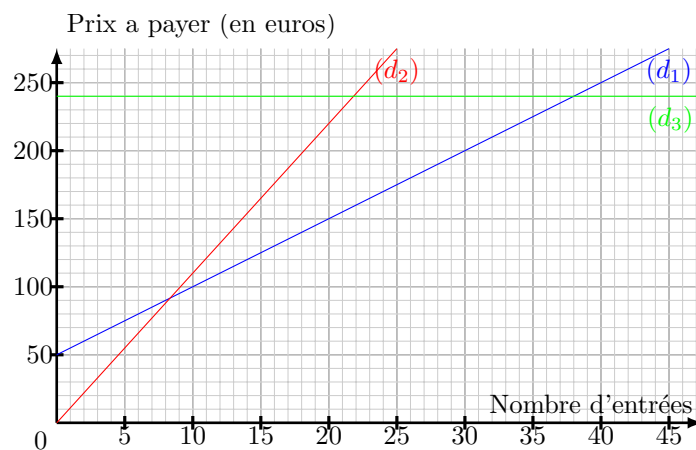
2 Analyse

2.1 Fonctions affines

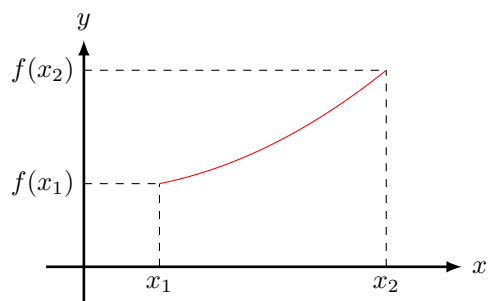
- Quelconque :



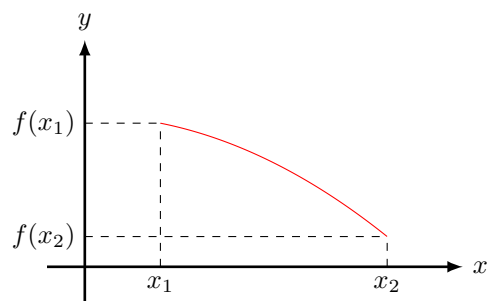
- A valeurs positives :



2.2 Fonctions (dé)croissantes



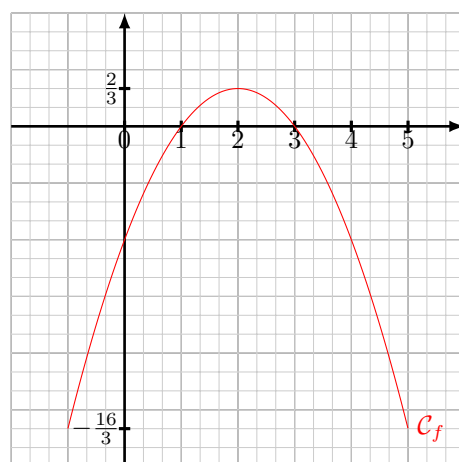
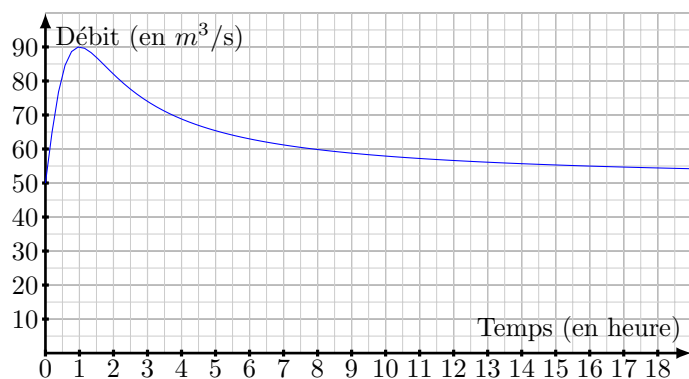
Fonction croissante



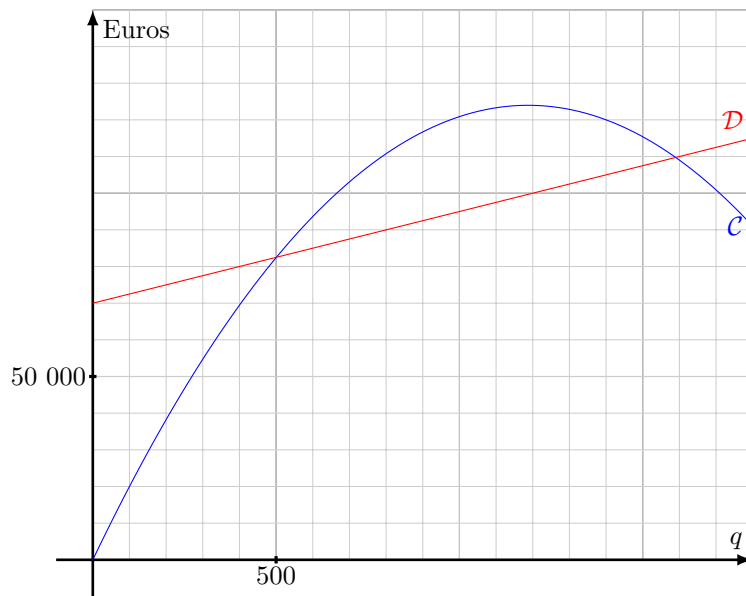
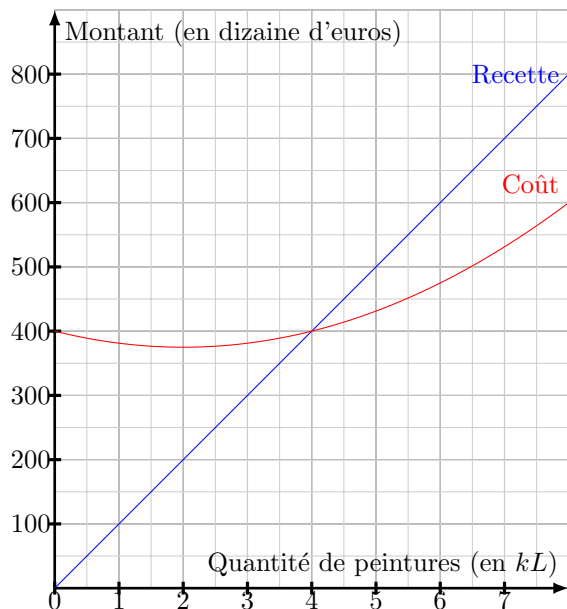
Fonction décroissante

2.3 Fonctions diverses

2.3.1 Résolution graphique

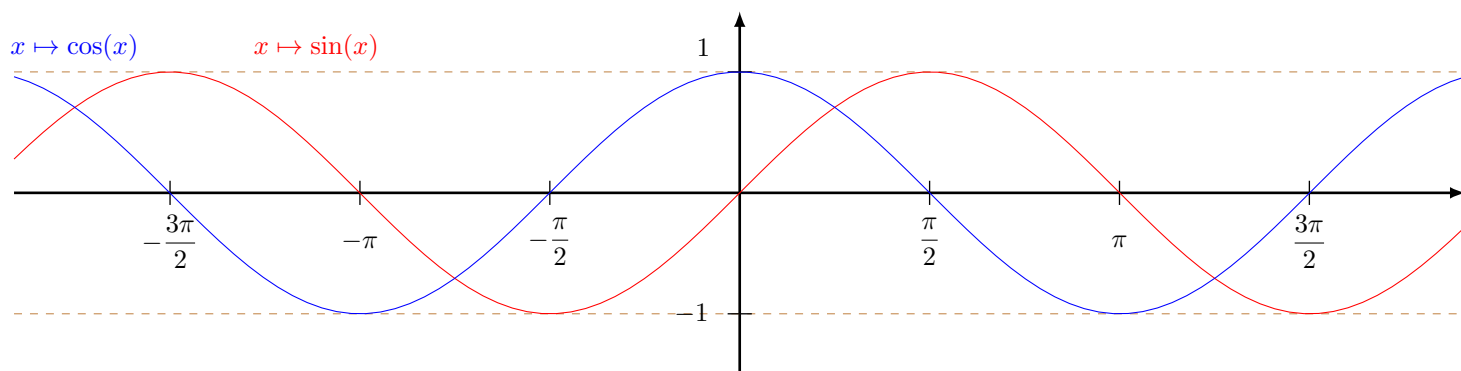


2.3.2 Comparaison de fonctions

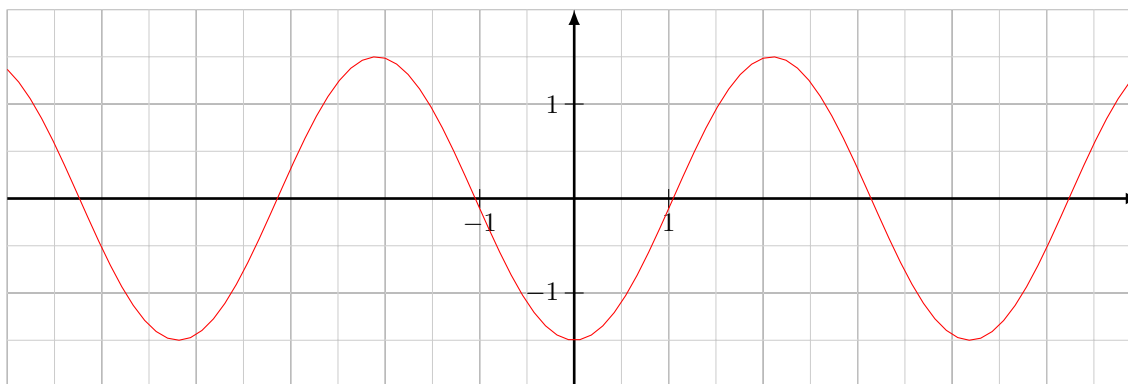


2.3.3 Fonctions sinusoidales

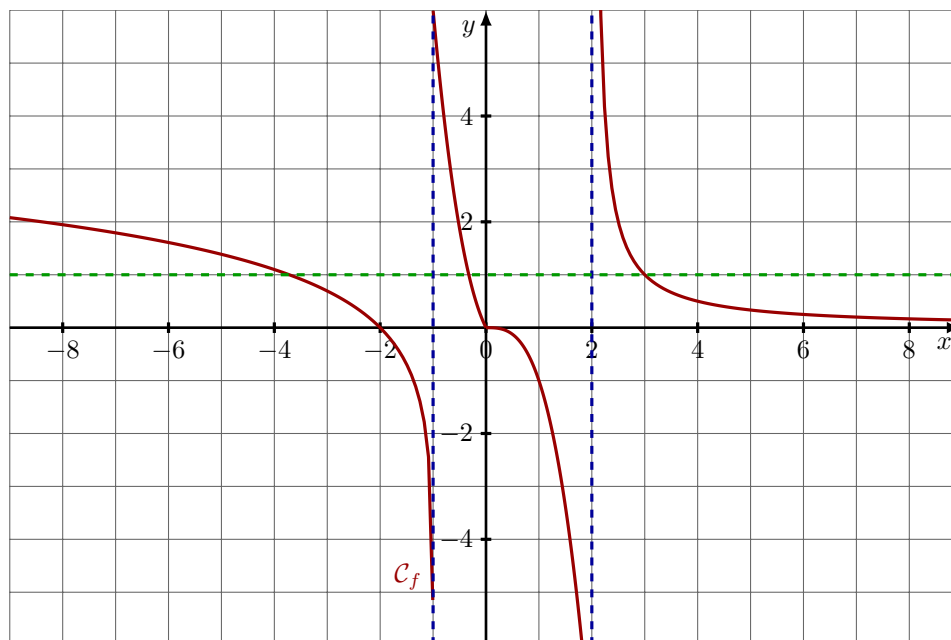
- Cosinus et sinus :



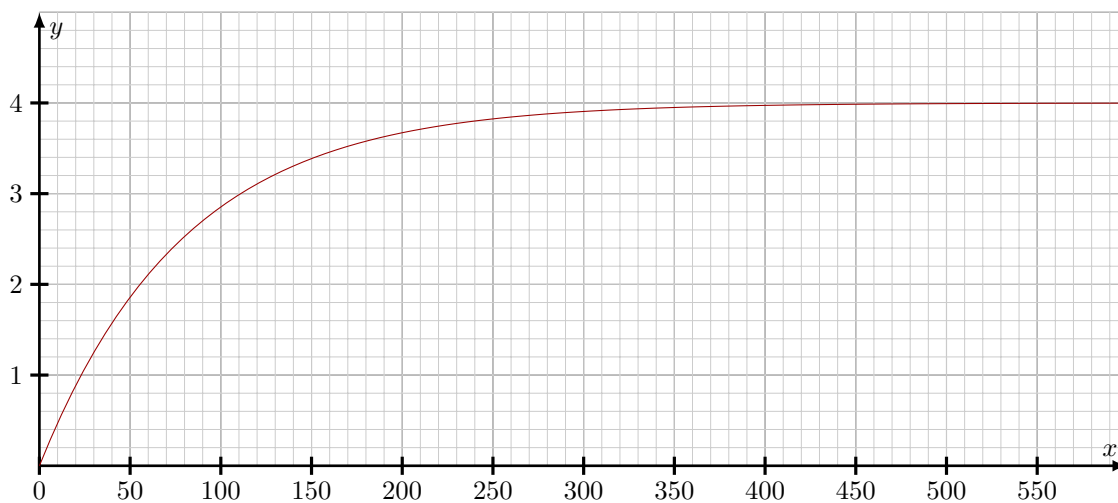
- Fonction sinusoidale à déterminer :



2.3.4 Etude de limites

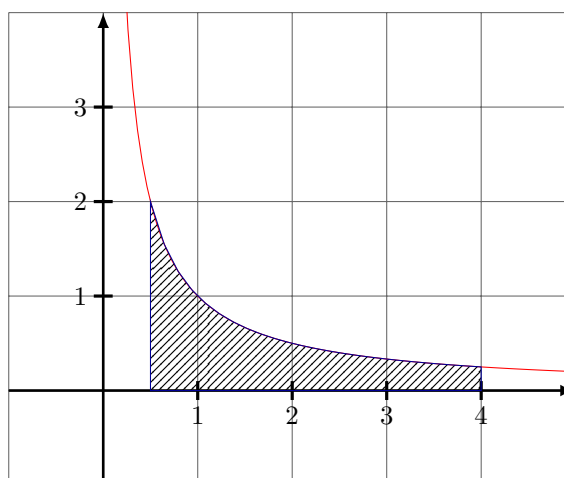


2.3.5 Une exponentielle croissante majorée

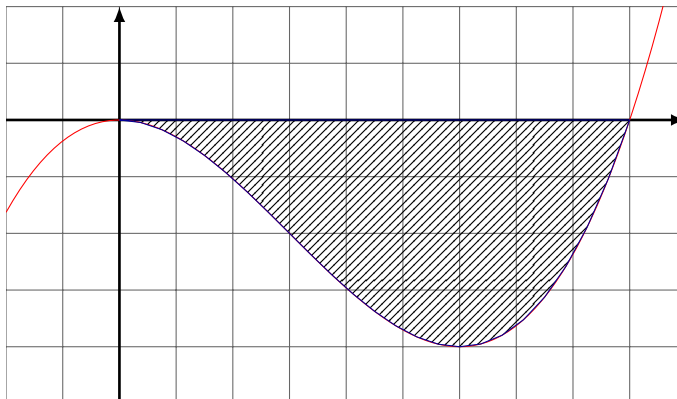


2.3.6 Intégrales

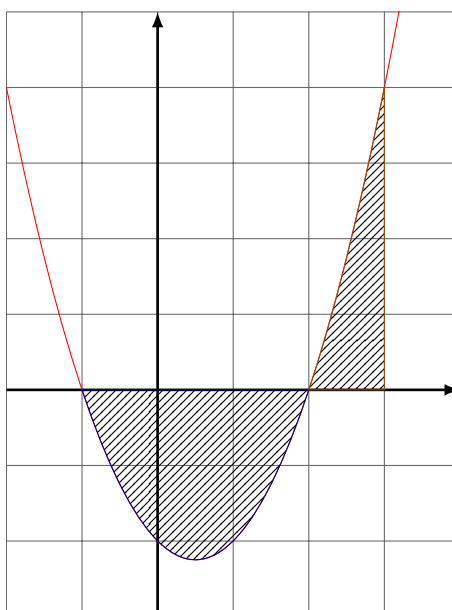
- Fonction positive :



- Fonction négative :

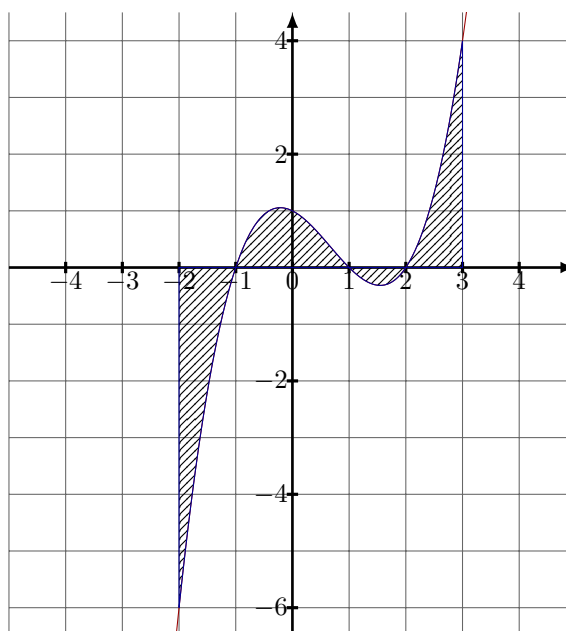


- Fonction quelconque :

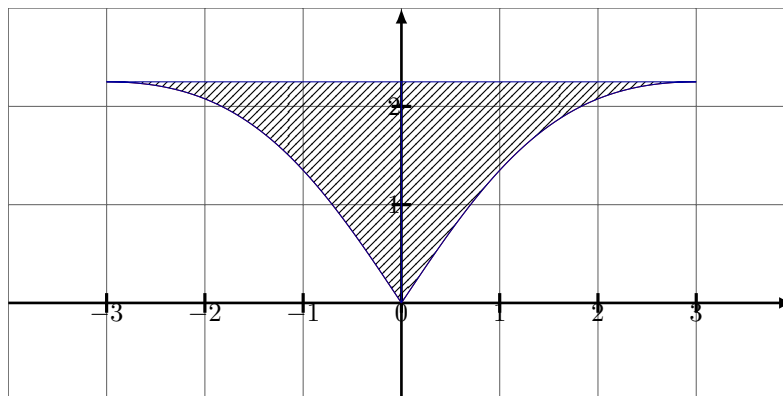


- Des exemples :

- Premier exemple :

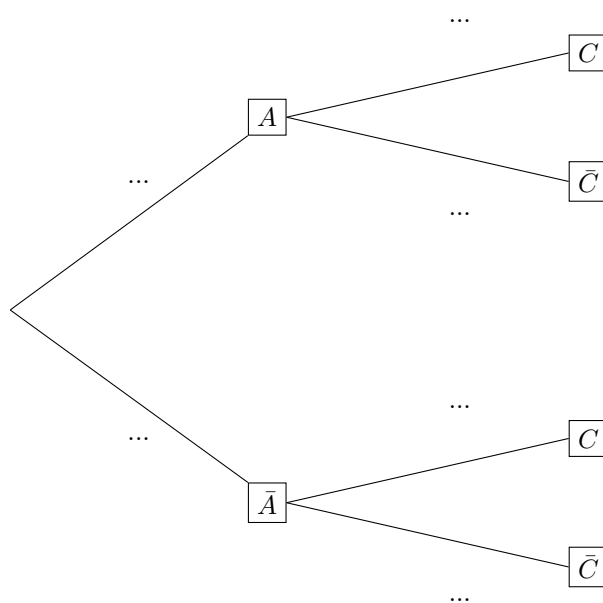


– Deuxième exemple :



3 Statistiques & Probabilités

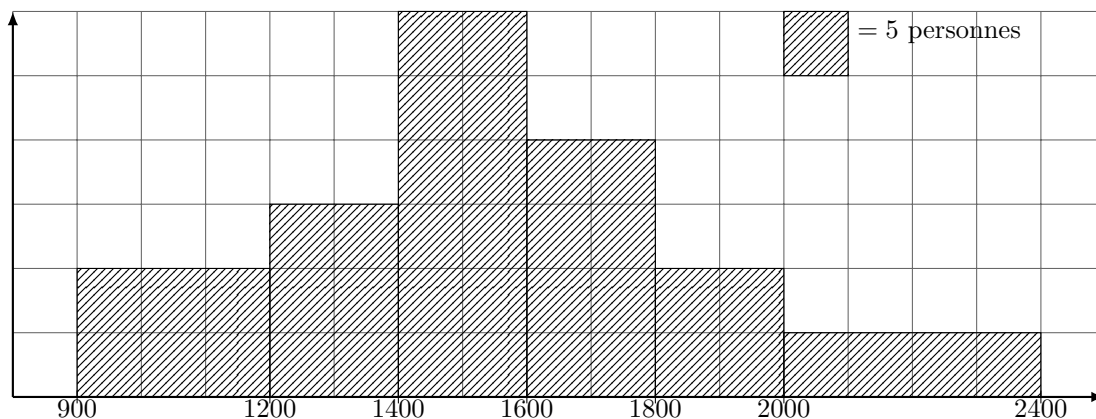
3.1 Arbre de probabilités



3.2 Diagrammes bâtons



3.3 Histogrammes



3.4 Diagrammes divers

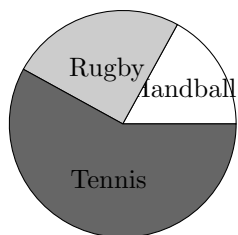


Diagramme circulaire

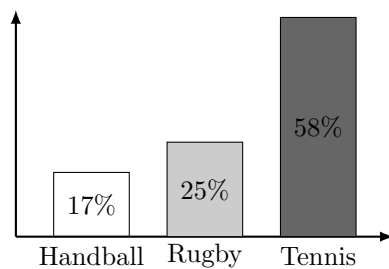


Diagramme en tuyau d'orgue

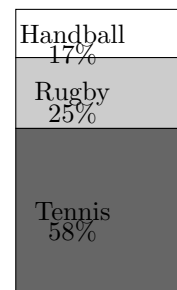


Diagramme en bande

4 Géométrie

4.1 Figures dans le plan

4.1.1 Les grands classiques

- Triangle:



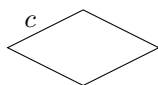
- Carré:

 c

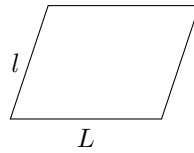
- Rectangle:

 L

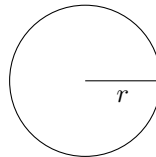
- Losange:



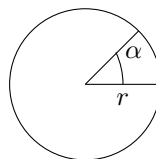
- **Parallélogramme:**



- **Cercle:**

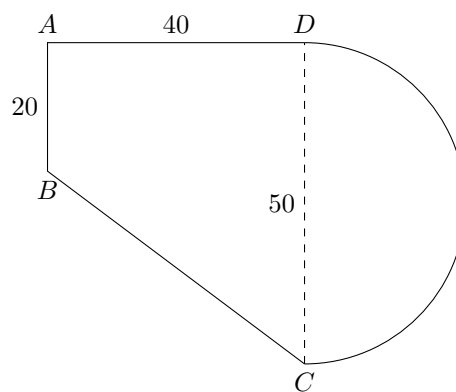


- **Arc de cercle:**

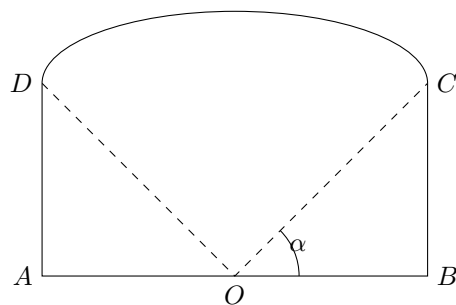


4.1.2 Figures particulières

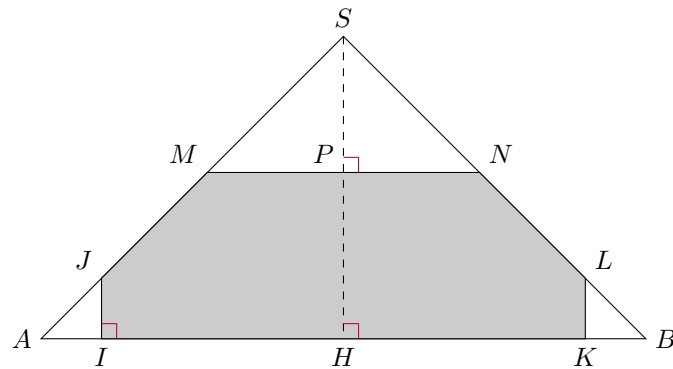
- **Premier exemple :**



- **Deuxième exemple :**



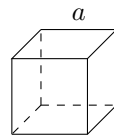
- Troisième exemple :



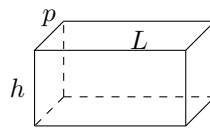
4.2 Figures dans l'espace

4.2.1 Les grands classiques

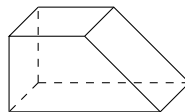
- Cube:



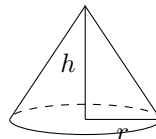
- Pavé droit:



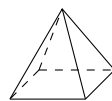
- Prisme droite:



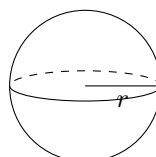
- Cône:



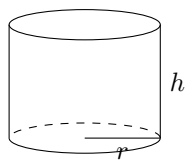
- Pyramide:



- Boule:

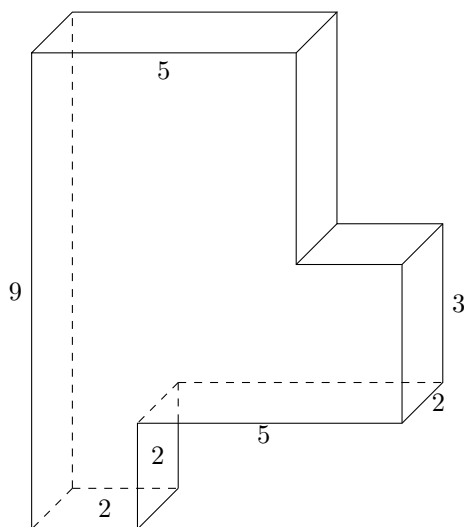


- **Cylindre:**

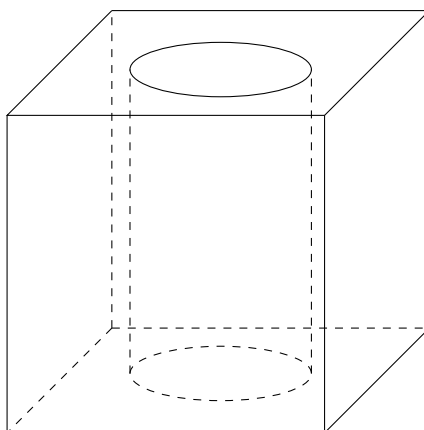


4.2.2 Figures particulières

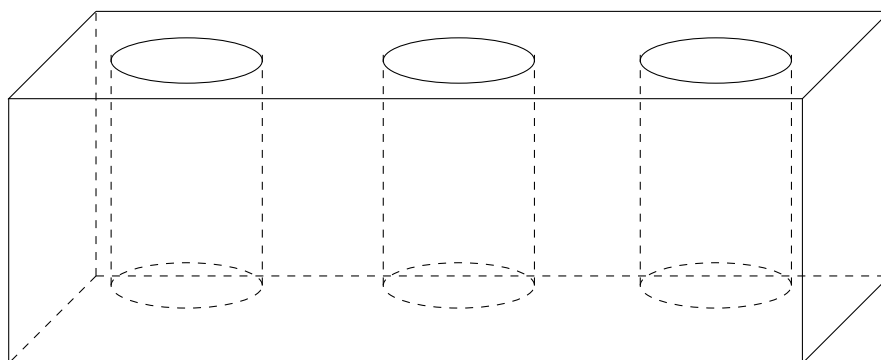
- Premier exemple :



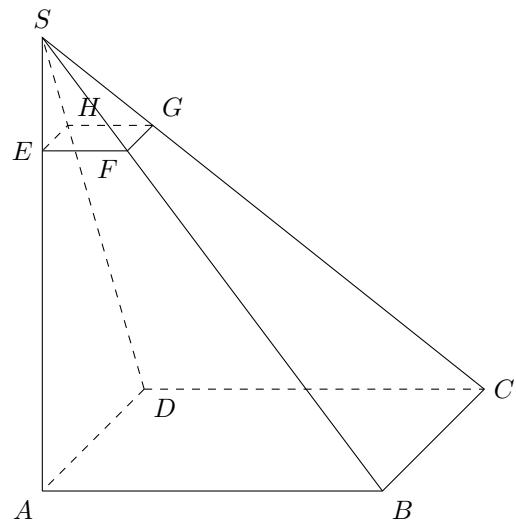
- Deuxième exemple :



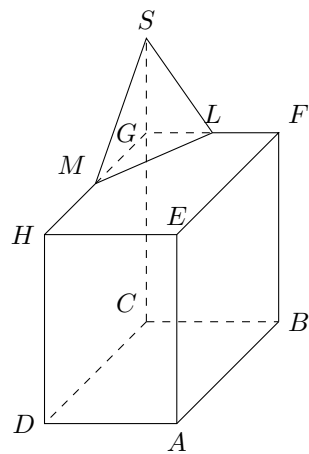
- Troisième exemple :



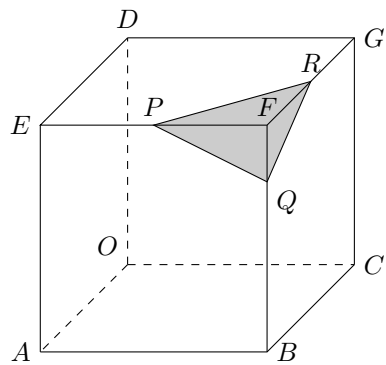
- Quatrième exemple :



- Cinquième exemple :

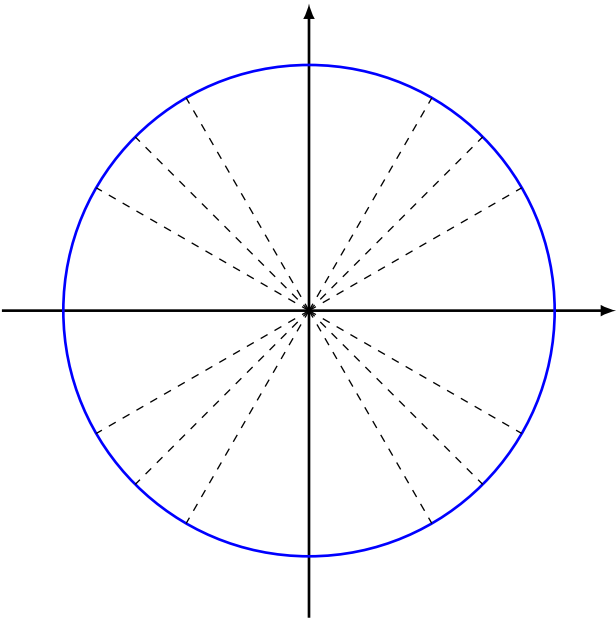


- Sixième exemple :

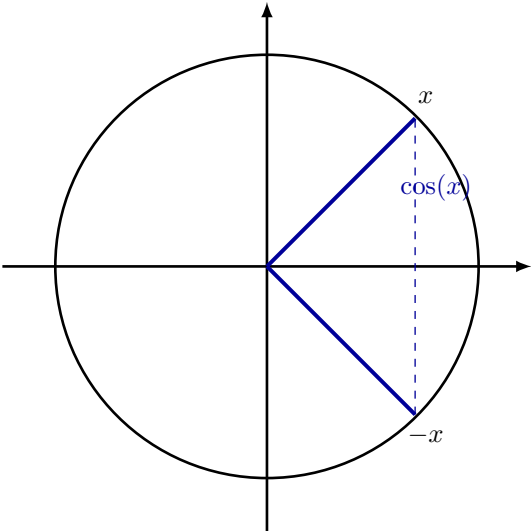
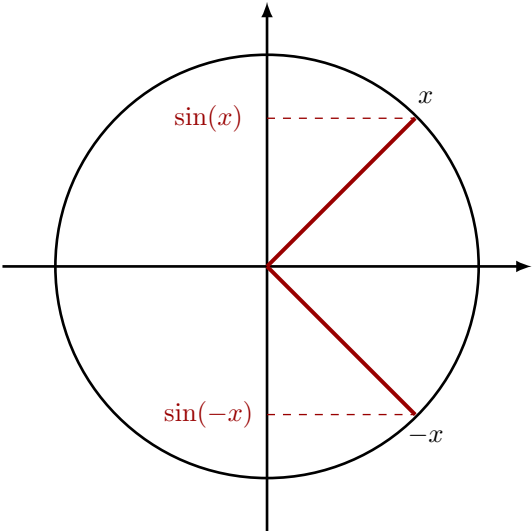
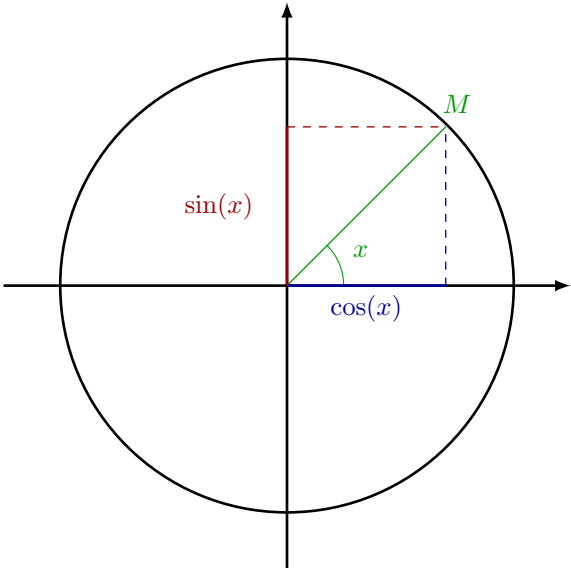


4.3 Cercle trigonométrique

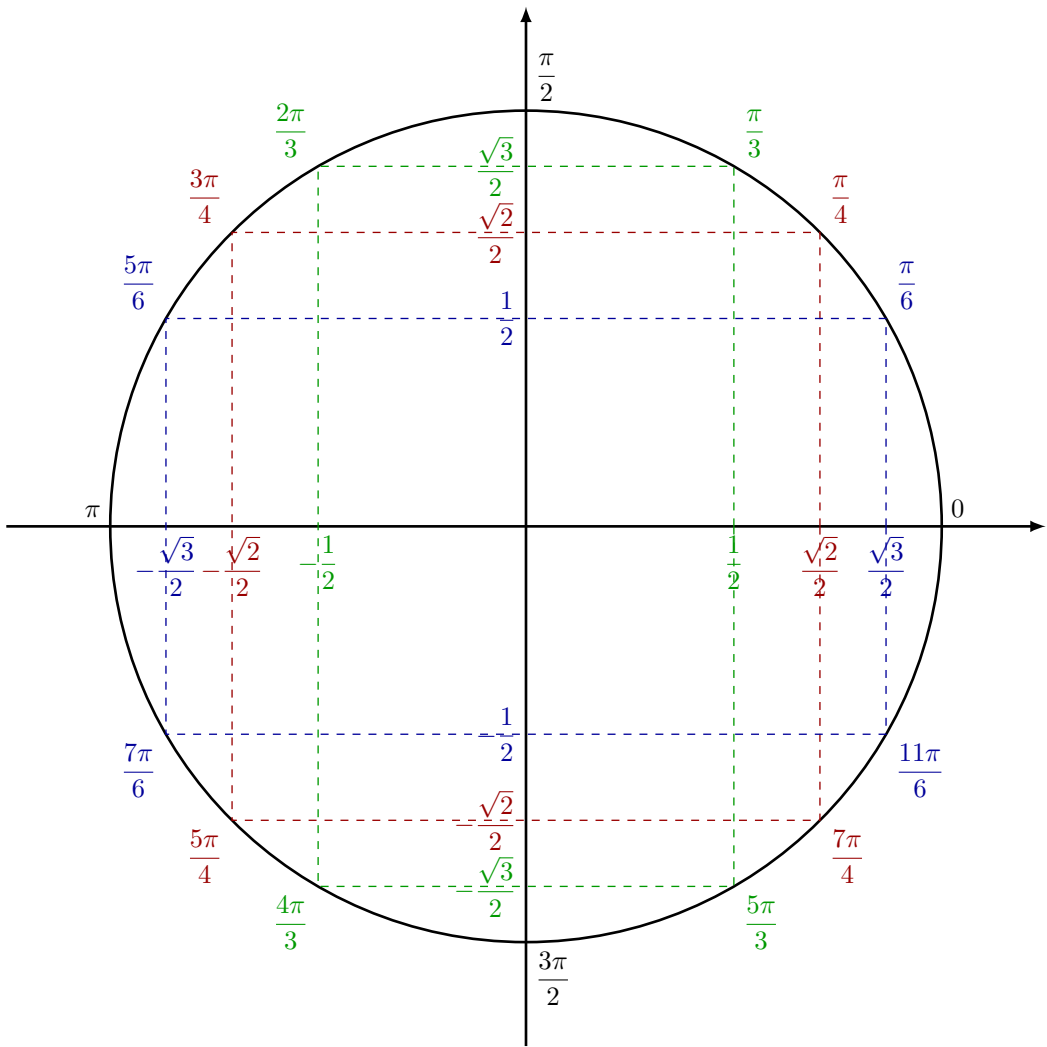
4.3.1 Le cercle



4.3.2 Sinus et cosinus

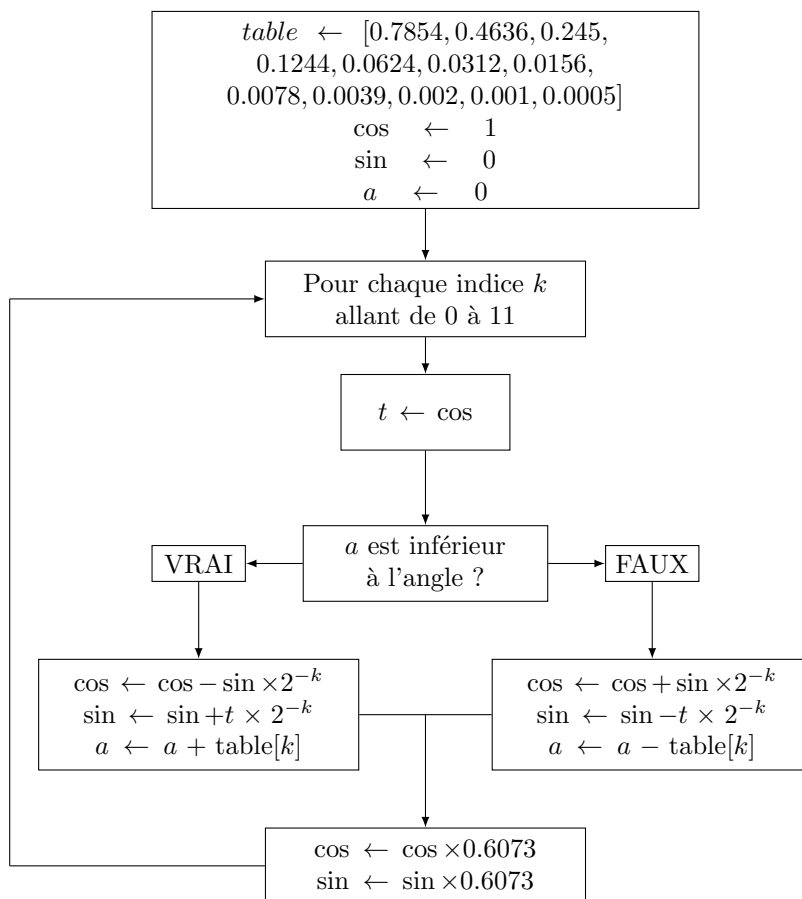


4.3.3 Valeurs remarquables



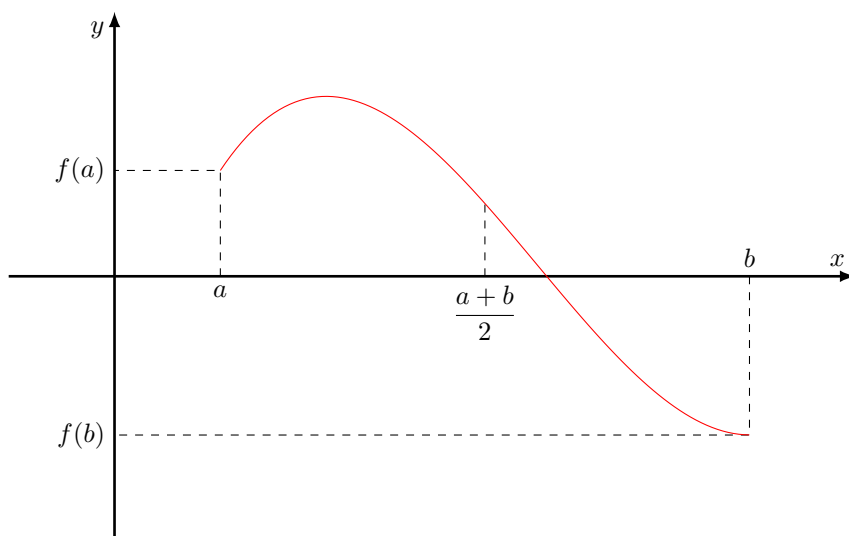
5 Informatique

5.1 Algorithme

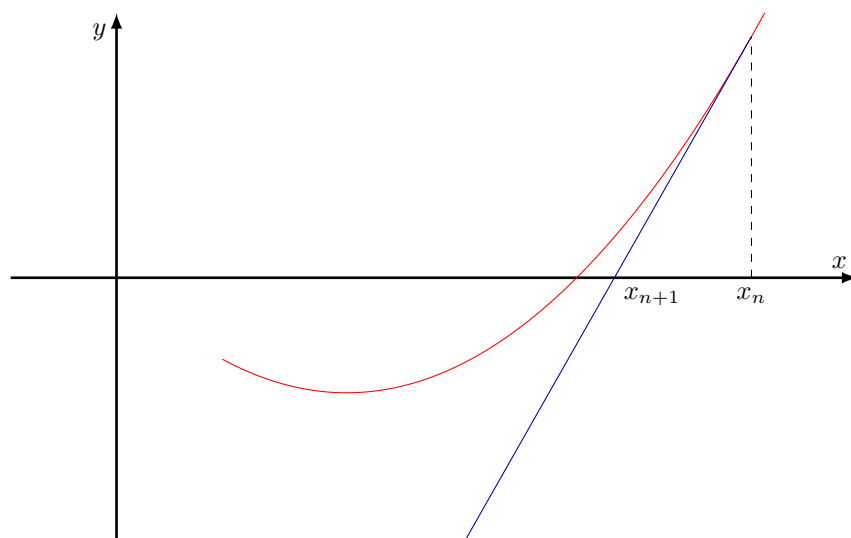


5.2 Méthodes numériques

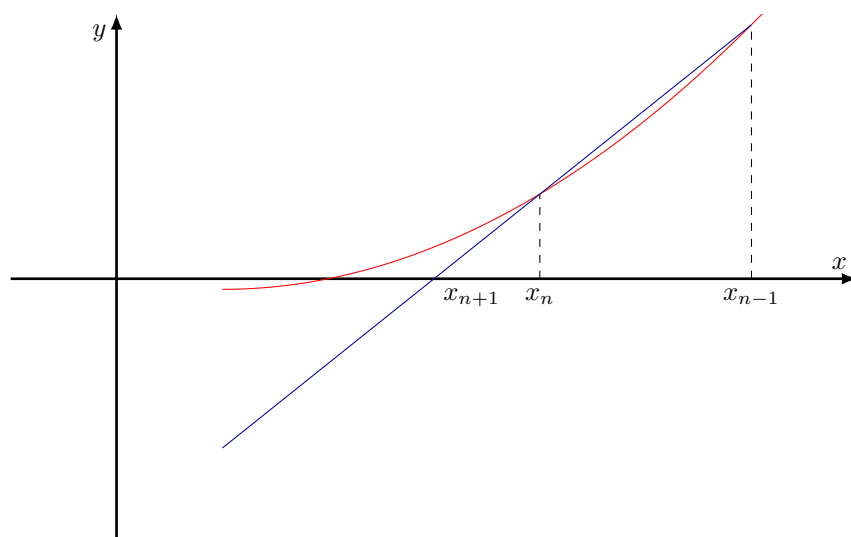
5.2.1 Dichotomie



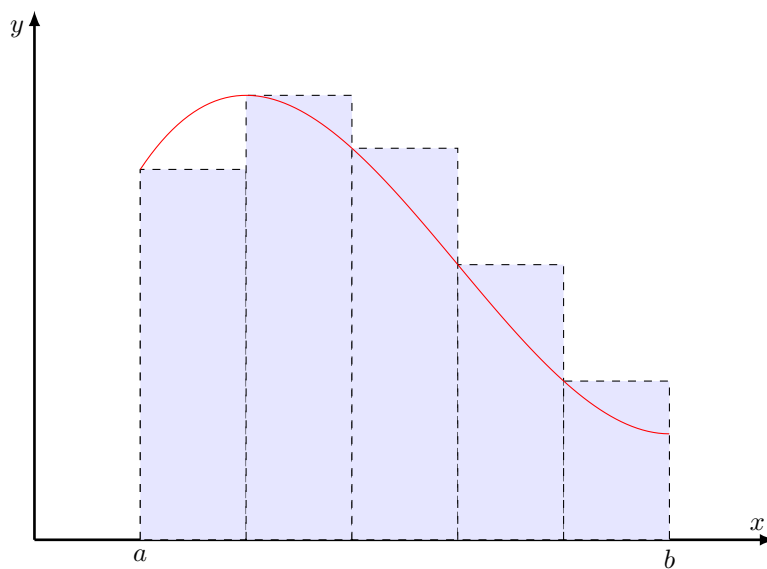
5.2.2 Méthode de Newton



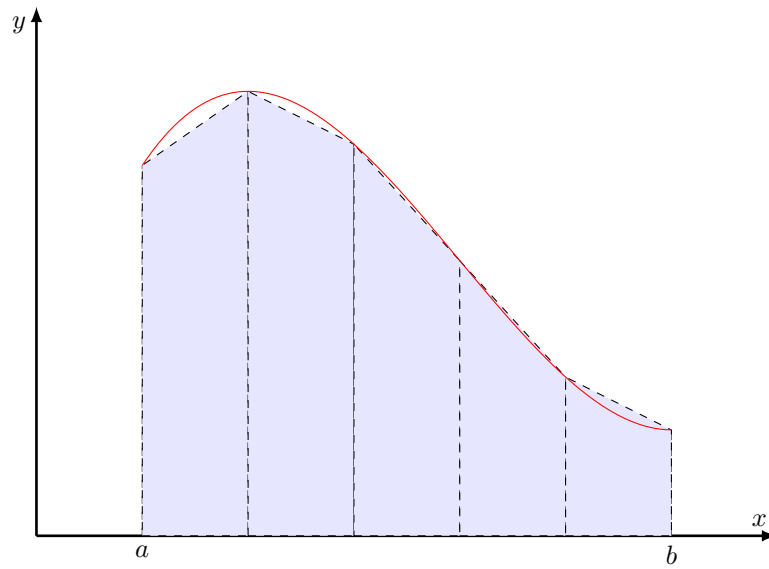
5.2.3 Méthode de la sécante



5.2.4 Méthode des rectangles



5.2.5 Méthode des trapèzes



5.2.6 Méthode de Simpson

