Latex 数学公式编辑参考

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1.1　latex 的发展历史

1.1.1　latex 的基本命令

北京[①]是中国的首都[②]. 如图1.1所示公式1.1是著名的格林公式，公式1.2是复变函数中的柯西公式。

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$$\iint_D \left(\frac{\partial Q}{\partial x}\frac{\partial P}{\partial y}\right)dxdy = \oint_L Pdx + Qdy \tag{1.1}$$

$$f(z_0) = \frac{1}{2\pi i}\oint_C \frac{f(z)}{z - z_0}dz \tag{1.2}$$

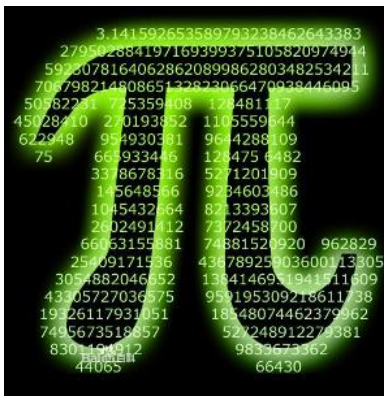

图 1.1: *this is a city*

[①]直辖市

[②]一个国家的首府

图 1.2: *this is a dog*

图 1.3: *this is a butterfly*

(a) this is a bufferfly

(b) this is a beautiful flower

图 1.4: *Two Subfigures example*

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Theorem 1 (Law of Large Numbers)**.**

Let $(X_n)_{n\in\mathbb{N}}$ be an infinite sequence of i.i.d. variables with finite expected value. Then:

$$\frac{1}{n}\sum_{i=1}^{n} X_i \xrightarrow{\text{a.s.}} \mathbb{E}(X_1).$$

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1.1.2 latex 的排版

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	文科	理科	工科	商科	总计
男	77	98	77	98	175
女	101	72	77	98	173
男	77	98	77	98	175
女	101	72	77	98	173
男	77	98	77	98	175
女	101	72	77	98	173
总计	178	170	178	170	348

表 1.1: 问卷调查对象基本情况汇总表.

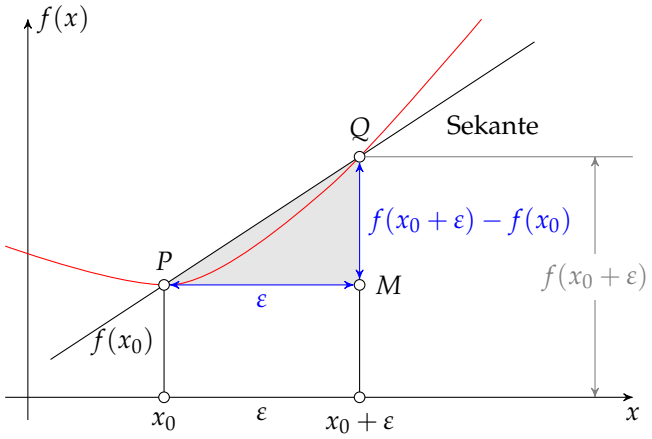

图 1.5: 函数的微分

Algorithm 1: IntervalRestriction

Function *Recurs(X, U)*:

Data: $G = (X, U)$ such that G^{tc} is an order.

Result: $G = (X, V)$ with $V \subseteq U$ such that G^{tc} is an interval order.

$V \longleftarrow U$

$S \longleftarrow \emptyset$

for $x \in X$ **do**

  $NbSuccInS(x) \longleftarrow 0$

  $NbPredInMin(x) \longleftarrow 0$

  $NbPredNotInMin(x) \longleftarrow |ImPred(x)|$

for $x \in X$ **do**

  if $NbPredInMin(x) = 0$ **and** $NbPredNotInMin(x) = 0$ **then**

    $AppendToMin(x)$

while $S \neq \emptyset$ **do**

  remove x from the list of T of maximal index

  while $|S \cap ImSucc(x)| \neq |S|$ **do**

    for $y \in S - ImSucc(x)$ **do**

      { remove from V all the arcs zy : }

      for $z \in ImPred(y) \cap Min$ **do**

        remove the arc zy from V

        $NbSuccInS(z) \longleftarrow NbSuccInS(z) - 1$

        move z in T to the list preceding its present list

        {i.e. If $z \in T[k]$, move z from $T[k]$ to $T[k-1]$}

      $NbPredInMin(y) \longleftarrow 0$

      $NbPredNotInMin(y) \longleftarrow 0$

      $S \longleftarrow S - \{y\}$

      $AppendToMin(y)$

  $RemoveFromMin(x)$

return true

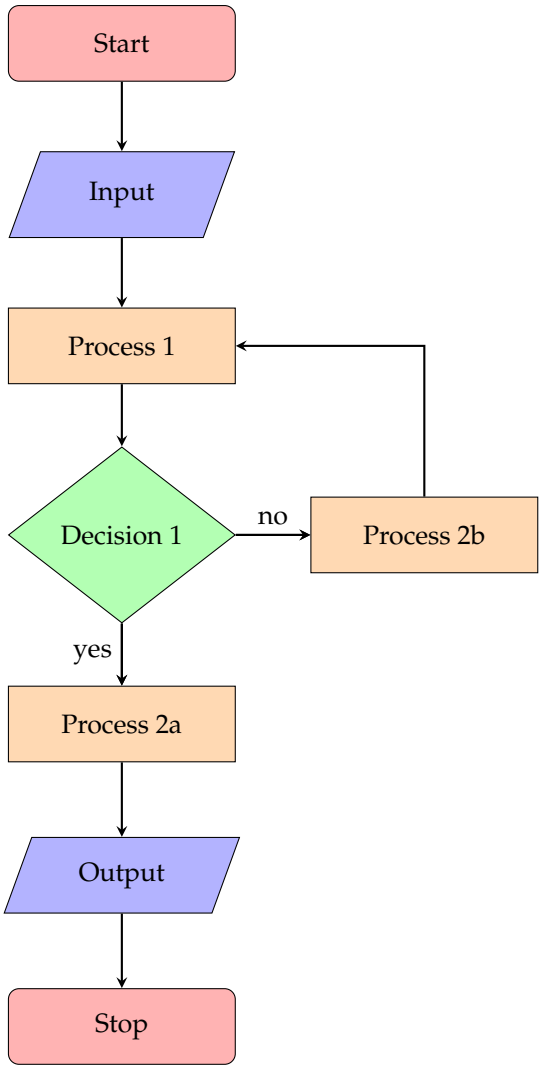

图 1.6: 函数的流程图示例

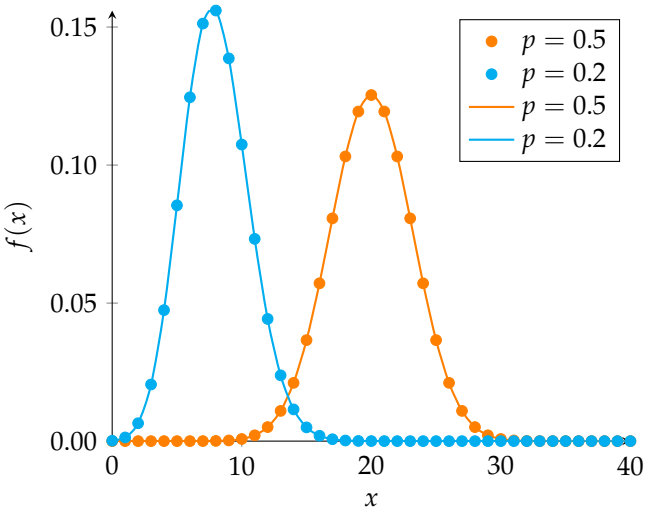

图 1.7: 函数的图像

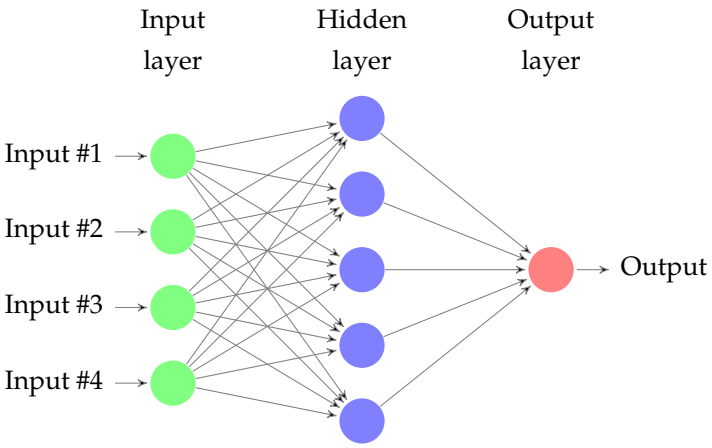
Input
layer
Hidden
layer
Output
layer
Input #1
Input #2
Input #3
Input #4
Output

图 1.8: 神经网络结构图