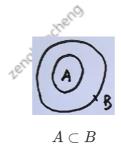
集合 运算 关系

Lenghaochend 运算 交 $A \cap B$ ABLengbaothens) 并 $A \cup B$ A + BLenghaodheno zengbaotheng 差 A - B $A \backslash B$ zengbaothene) 补

关系

包含





 \overline{A}

互斥 (不相容)

Lenghacthenis



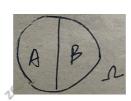
_Lengbackens

$$\forall x \in A \Rightarrow x \not \in B, \forall x \in B \Rightarrow x \not \in A$$

$$\mathbb{H}AB = \emptyset$$

对立

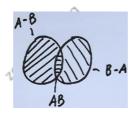
Lenghanchend



 $orall x \in A \Rightarrow x \notin B, orall x \in B \Rightarrow x \notin A$ $\exists x \in \Omega \Rightarrow x \in A \exists x \in B$ $\exists AB = \emptyset \exists A + B = \Omega$ $\exists \overline{A} = B$

and backheris

Lengbachens



A=(A-B)+AB且A-B与AB互斥 A+B=(A-B)+AB+(B-A)且A-B,AB,B-A两两互斥 Lenghardhend

三角 反三角

三角

$$\sec x = \frac{1}{\cos x}$$

$$\csc x = \frac{1}{\sin x}$$

$$\sec^2 x = 1 + \tan^2 x$$

$$\csc^2 x = 1 + \cot^2 x$$

$$\sin \frac{x}{2} = \pm \sqrt{\frac{1 - \cos x}{2}}$$

$$\csc \frac{x}{2} = \pm \sqrt{\frac{1 + \cos x}{2}}$$

zenajbaochenia

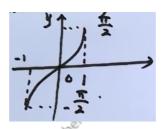
反三角

._en[©])

y = f(x)单调 $\Rightarrow \exists$ 反函数

$$y=\sin x, x\in [-rac{\pi}{2},rac{\pi}{2}]$$
 $y=\cos x, x\in [0,\pi]$





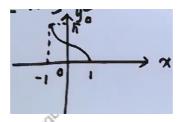
 $y = \arcsin x$

$$1.\; x \in [-1,1], y \in [-\frac{\pi}{2},\frac{\pi}{2}]$$

$$2. y = \arcsin x$$
为奇函数

zengbacchenes

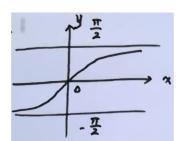
Lenghaochens



 $y = \arccos x$

$$x\in[-1,1],y\in[0,\pi]$$

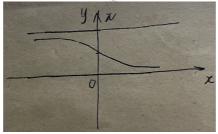
Lengbaodhens)



 $y = \arctan x$

1.
$$x \in (-\infty, +\infty), y \in (-\frac{\pi}{2}, \frac{\pi}{2})$$

$$2. y = \arctan x$$
为奇函数



$$y = arccot x$$

$$x\in (-\infty,+\infty), y\in (0,\pi)$$

rendpartieur

1.
$$\arcsin x + \arccos x = \frac{\pi}{2}, (-1 \le x \le 1)$$

2.
$$\arctan x + \operatorname{arccot} x = \frac{\pi}{2}, (-\infty \le x \le +\infty)$$

常见不等式与数列

