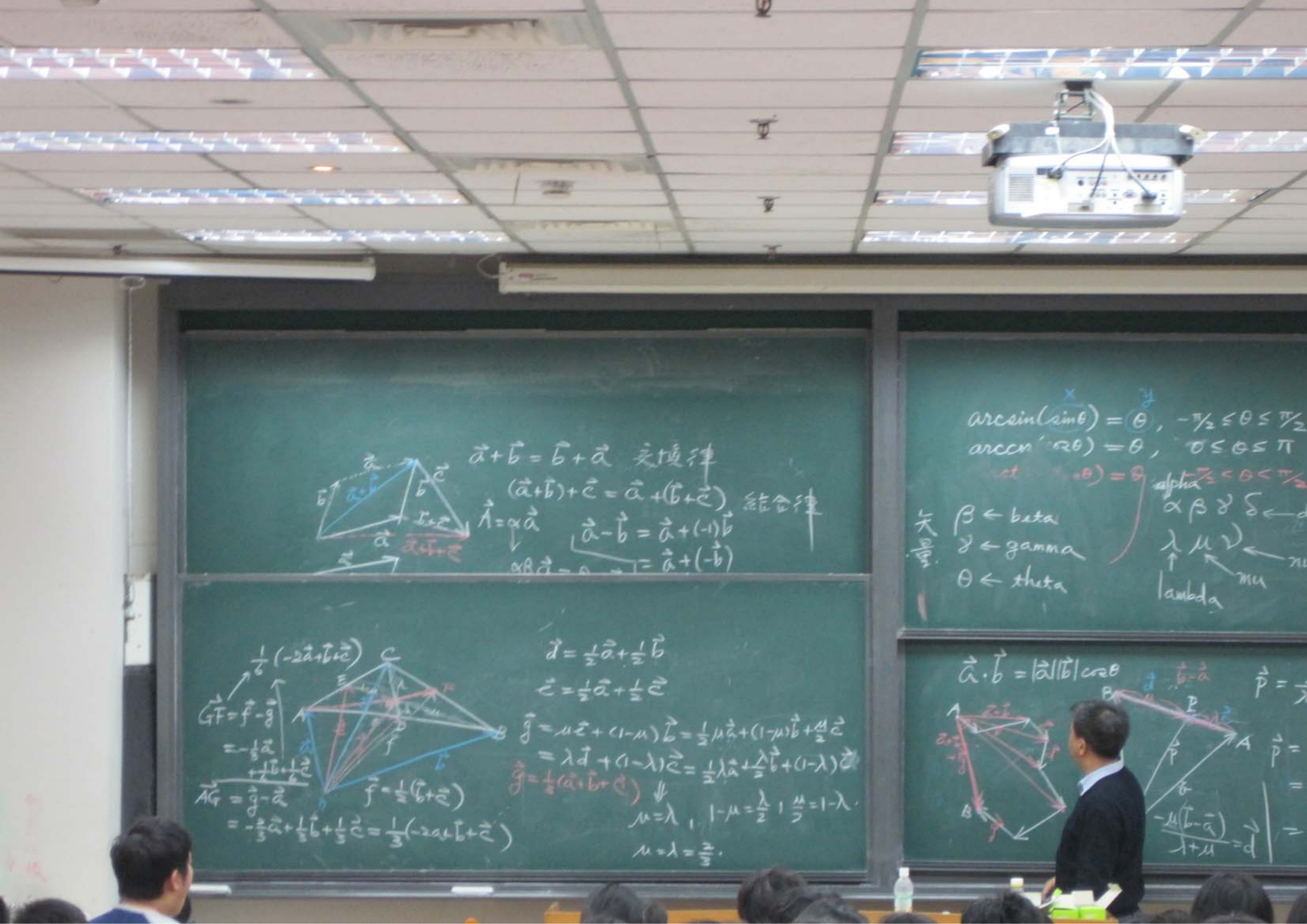
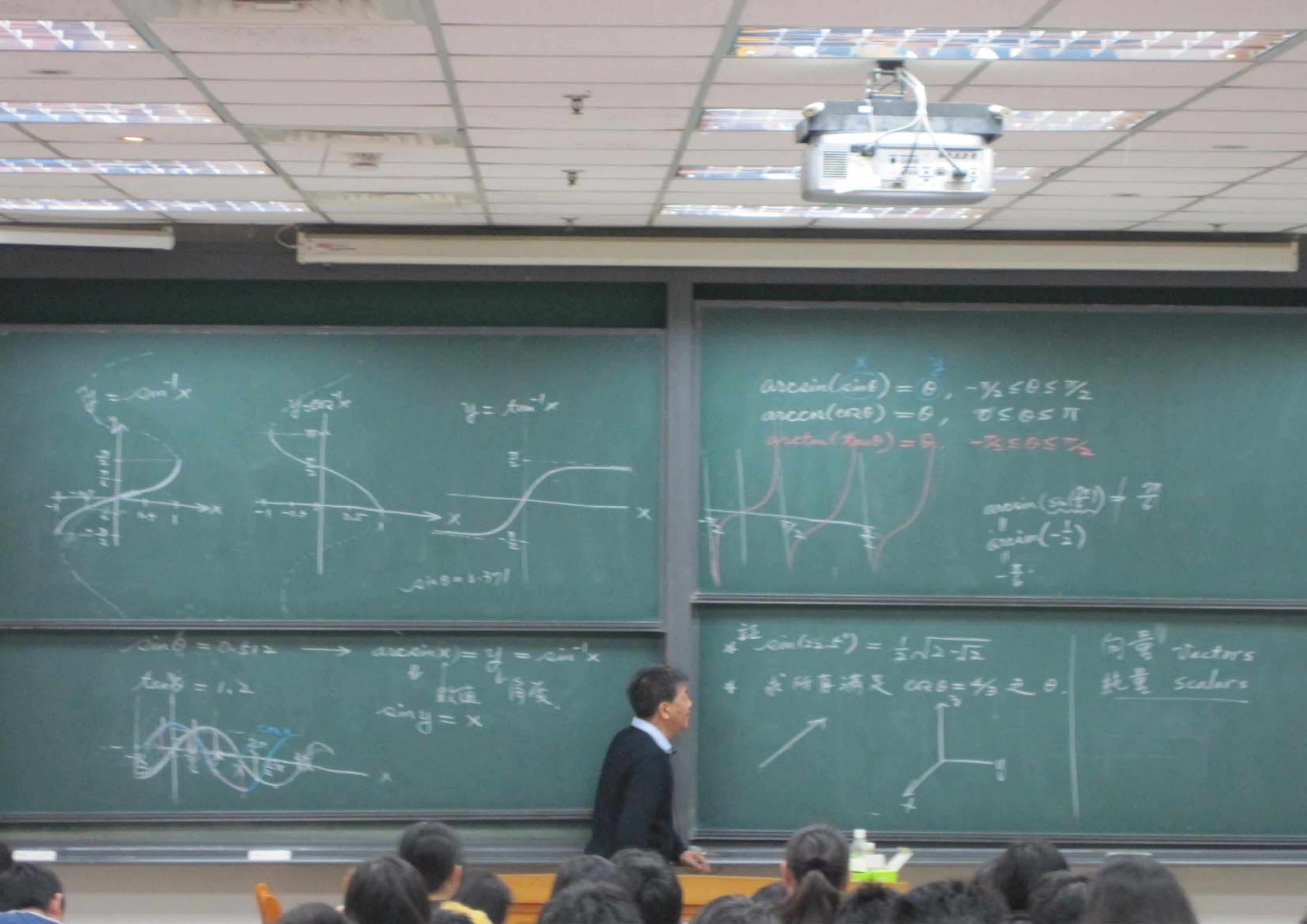
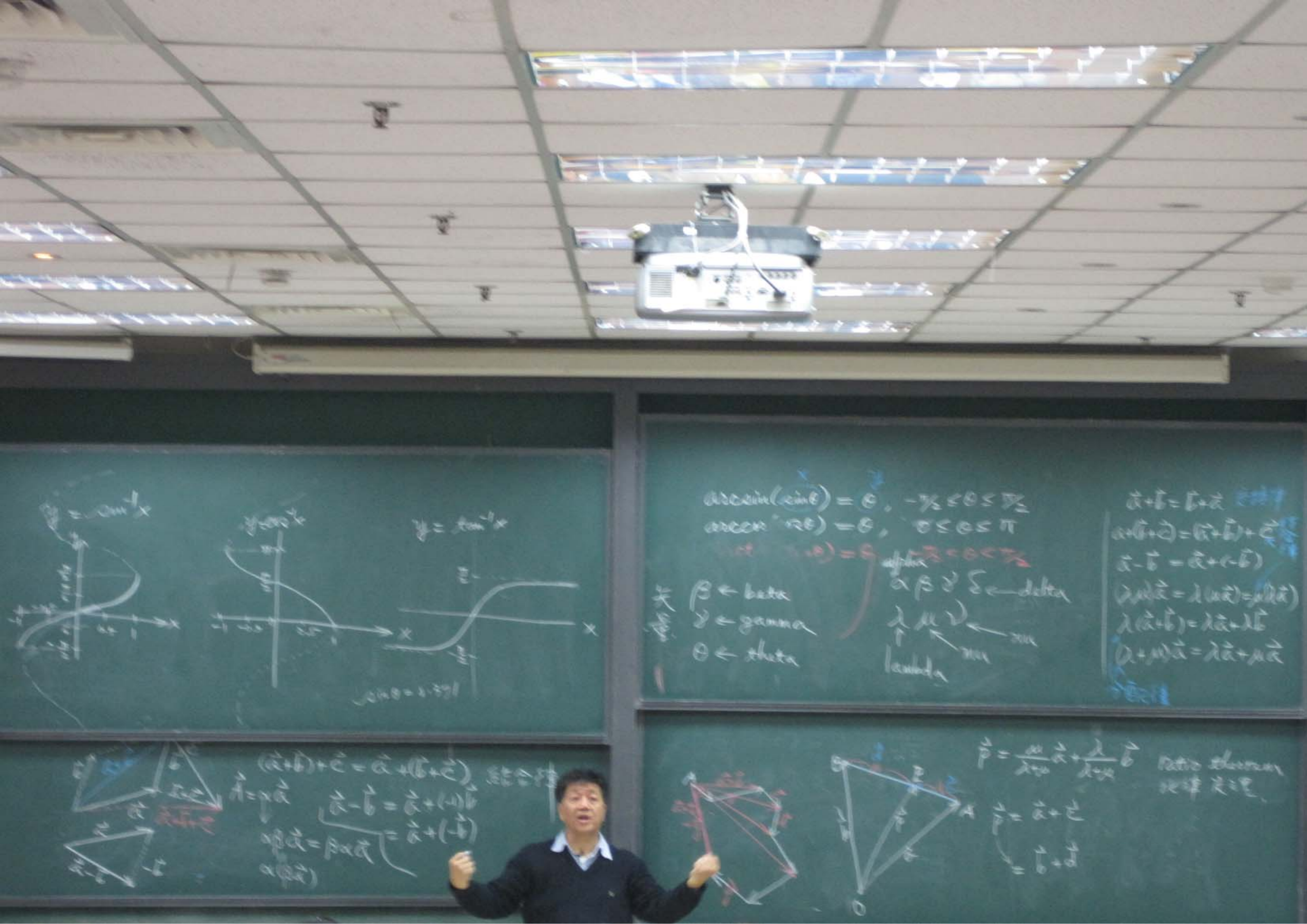
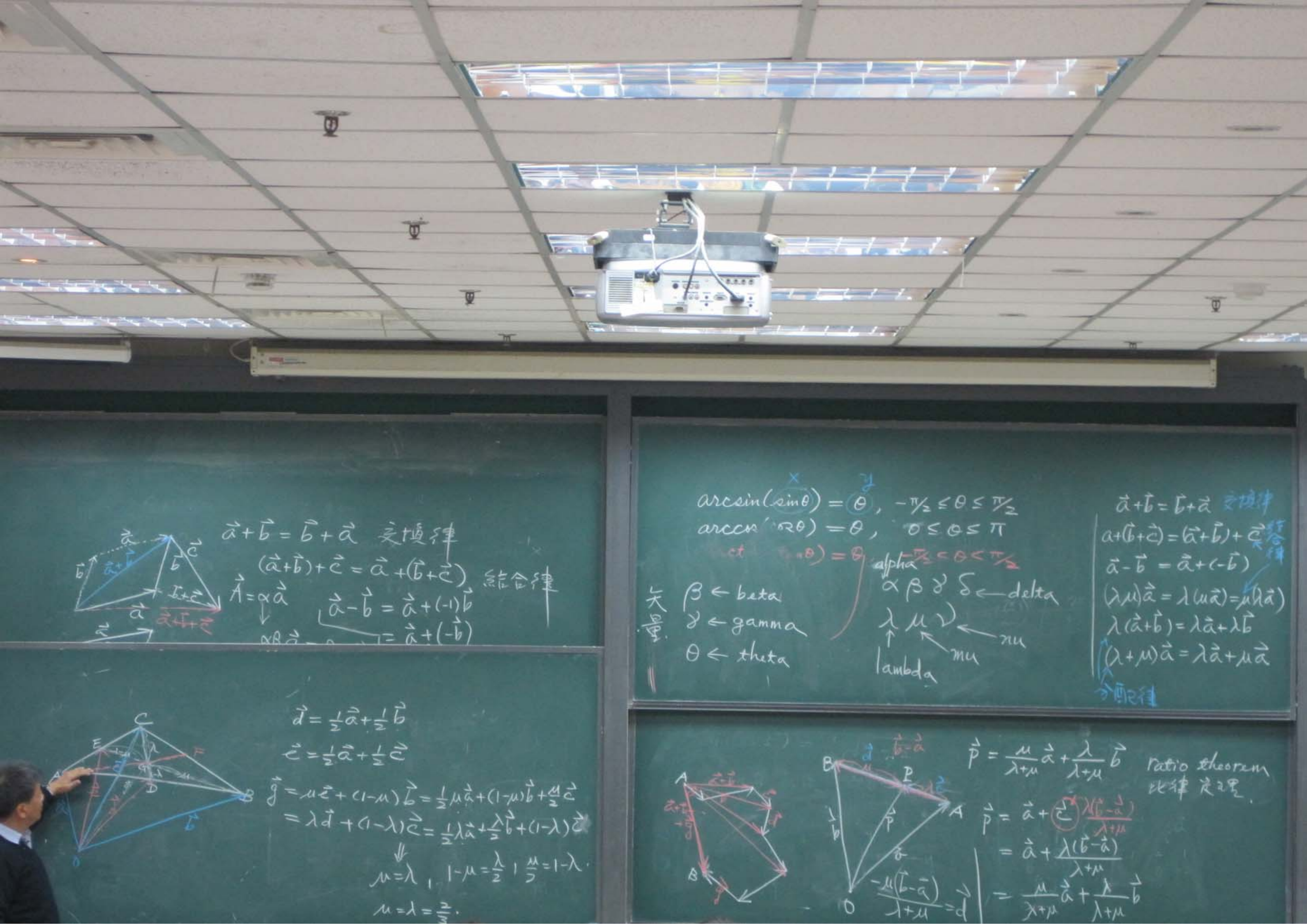


$\vec{a}+\vec{b}=\vec{b}+\vec{a}$ 交換律
$(\vec{a}+\vec{b})+\vec{c}=\vec{a}+(\vec{b}+\vec{c})$ 結合律
$\vec{A}=\alpha\vec{a}$
$\vec{a}-\vec{b}=\vec{a}+(-1)\vec{b}$
$=\vec{a}+(-\vec{b})$
$\arcsin(\sin\theta)=\theta,\ -\pi/2\le\theta\le\pi/2$
$\theta\le\theta\le\pi$
矢量
β ← beta
γ ← gamma
θ ← theta
alpha
$\alpha\ \beta\ \gamma\ \delta$
$\lambda\ \mu\ \nu$
lambda
mu
$\frac{1}{3}(-2\vec{a}+\vec{b}+\vec{c})$
$\vec{GF}=\vec{f}-\vec{g}$
$\vec{AG}=\vec{g}-\vec{a}$
$=-\frac{2}{3}\vec{a}+\frac{1}{3}\vec{b}+\frac{1}{3}\vec{c}=\frac{1}{3}(-2\vec{a}+\vec{b}+\vec{c})$
$\vec{d}=\frac{1}{2}\vec{a}+\frac{1}{2}\vec{b}$
$\vec{e}=\frac{1}{2}\vec{a}+\frac{1}{2}\vec{c}$
$\vec{g}=\mu\vec{e}+(1-\mu)\vec{b}=\frac{1}{2}\mu\vec{a}+(1-\mu)\vec{b}+\frac{\mu}{2}\vec{c}$
$=\lambda\vec{d}+(1-\lambda)\vec{c}=\frac{1}{2}\lambda\vec{a}+\frac{\lambda}{2}\vec{b}+(1-\lambda)\vec{c}$
$\vec{g}=\frac{1}{3}(\vec{a}+\vec{b}+\vec{c})$
$\vec{f}=\frac{1}{2}(\vec{b}+\vec{c})$
$\mu=\lambda,\ 1-\mu=\frac{\lambda}{2},\ \frac{\mu}{2}=1-\lambda$
$\mu=\lambda=\frac{2}{3}$
$\vec{a}\cdot\vec{b}=|\vec{a}||\vec{b}|\cos\theta$
$\frac{-\mu(\vec{b}-\vec{a})}{\lambda+\mu}=\vec{d}$


y = tan⁻¹x
arcsin(sinθ) = θ, −π/2 ≤ θ ≤ π/2
arccos(cosθ) = θ, 0 ≤ θ ≤ π
arctan(tanθ) = θ, −π/2 ≤ θ ≤ π/2
sinθ = 0.512 → arcsin x) = y = sin⁻¹x
tanθ = 1.2
數值 角度
sin y = x
sin(22.5°) = ½√(2−√2)
求所有滿足 cosθ = 4/3 之θ.
向量 Vectors
純量 scalars



y = tan⁻¹x
β ← beta
γ ← gamma
θ ← theta
delta
lambda
Ratio theorem



a + b = b + a 交換律
(a + b) + c = a + (b + c) 結合律
A = αa
a − b = a + (−1)b
= a + (−b)
d = ½a + ½b
e = ½a + ½c
g = μe + (1−μ)b = ½μa + (1−μ)b + μ/2 c
= λd + (1−λ)c = ½λa + λ/2 b + (1−λ)c
μ = λ , 1−μ = λ/2 , μ/2 = 1−λ
μ = λ = 2/3
arcsin(sinθ) = θ , −π/2 ≤ θ ≤ π/2
arccos(cosθ) = θ , 0 ≤ θ ≤ π
alpha
α β γ δ ← delta
λ μ ν
lambda
mu
nu
矢量
β ← beta
γ ← gamma
θ ← theta
a + b = b + a 交換律
a + (b + c) = (a + b) + c 結合律
a − b = a + (−b)
(λμ)a = λ(μa) = μ(λa)
λ(a + b) = λa + λb
(λ + μ)a = λa + μa
分配律
p = μ/(λ+μ) a + λ/(λ+μ) b
ratio theorem
比律定理
p = a + λ(b − a)/(λ+μ)
= a + λ(b − a)/(λ+μ)
= μ/(λ+μ) a + λ/(λ+μ) b