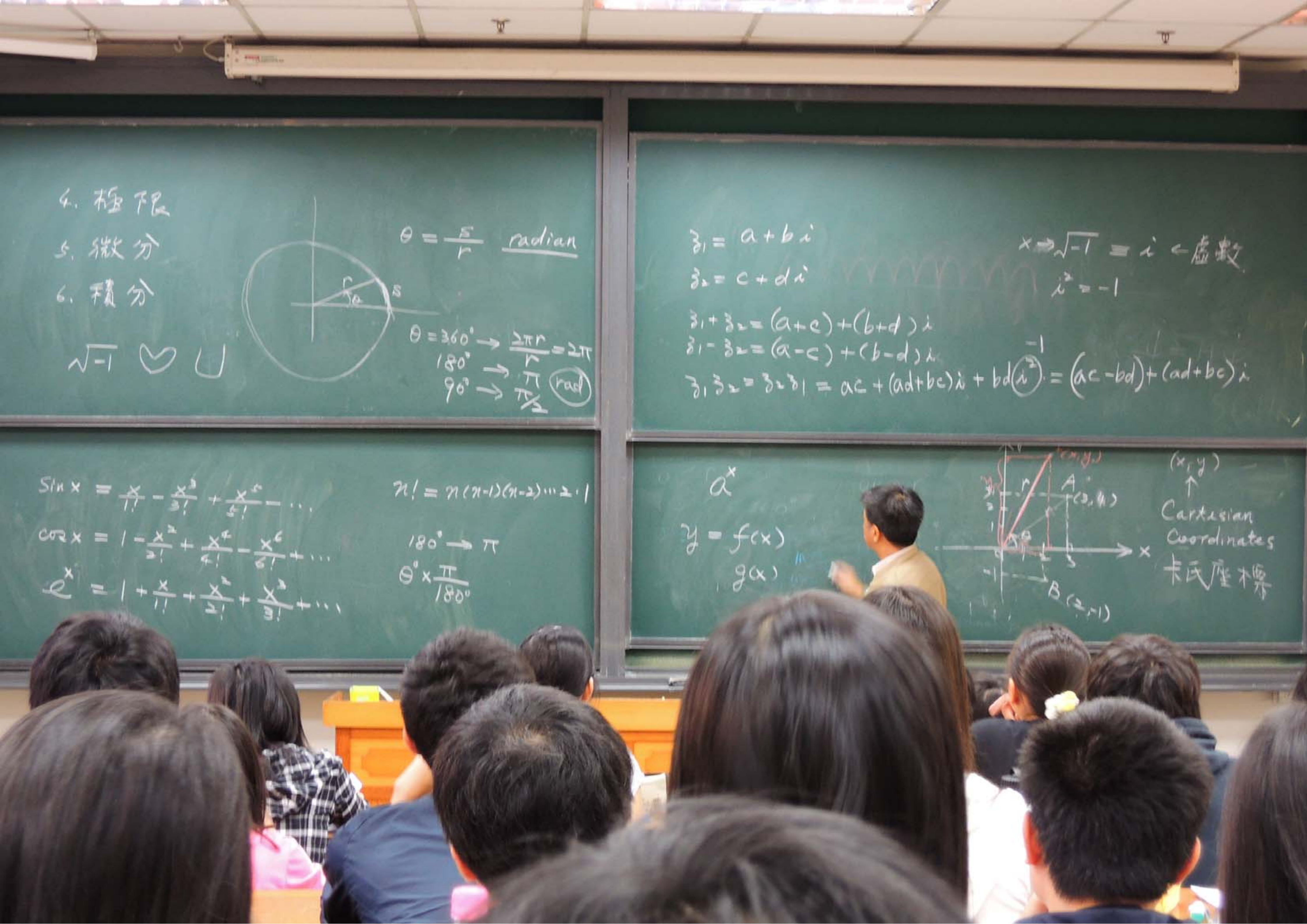
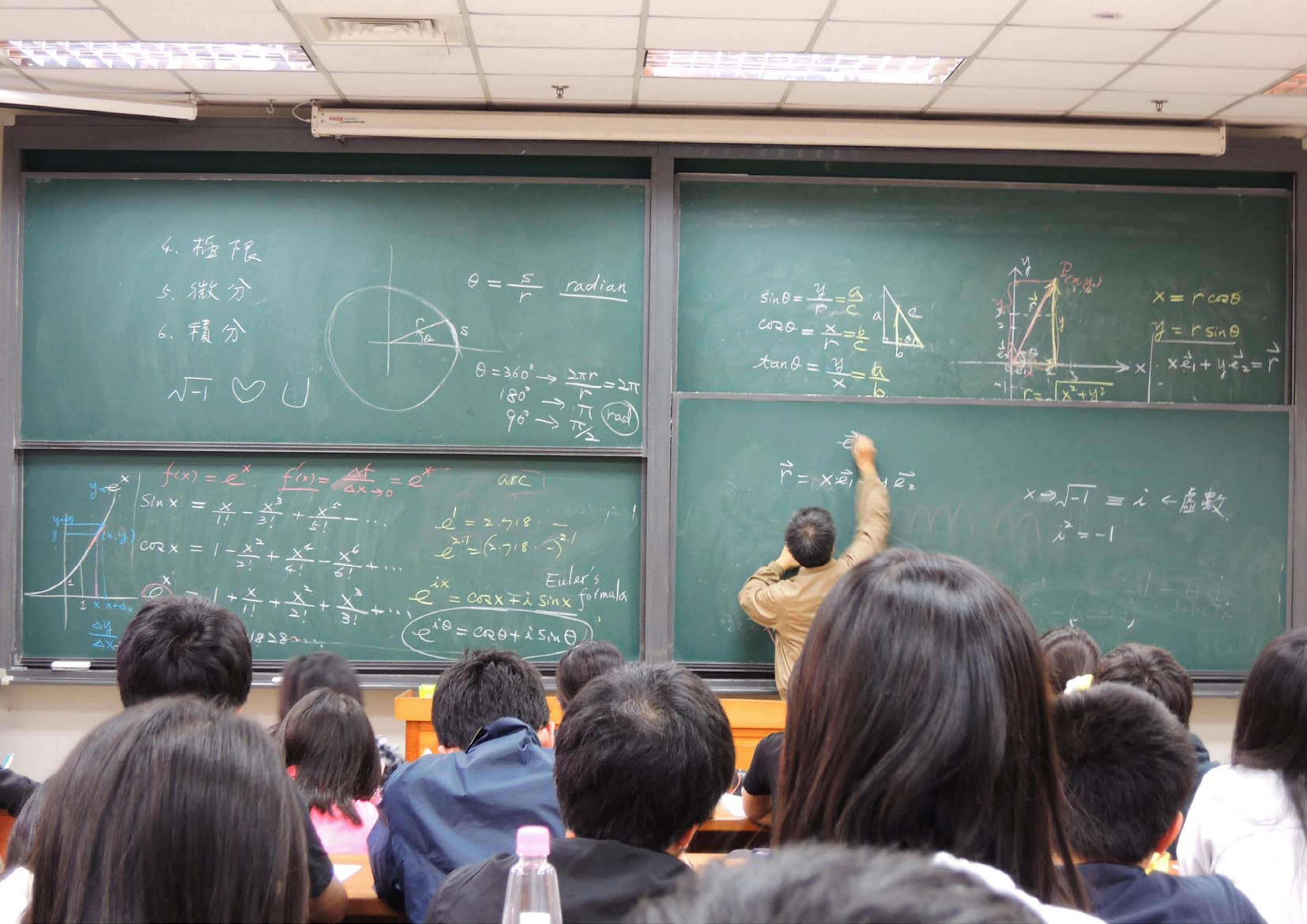


4. 極限
5. 微分
6. 積分
$\sqrt{-1}$
$\theta = \frac{s}{r}$ radian
$\theta = 360° \to \frac{2\pi r}{r} = 2\pi$
$180° \to \pi$
$90° \to \pi/2$
rad
$z_1 = a + bi$
$z_2 = c + di$
$x \to \sqrt{-1} = i$ ← 虛數
$i^2 = -1$
$z_1 + z_2 = (a+c) + (b+d)i$
$z_1 - z_2 = (a-c) + (b-d)i$
$z_1 z_2 = z_2 z_1 = ac + (ad+bc)i + bd\,i^2 = (ac-bd) + (ad+bc)i$
$\sin x = \frac{x}{1!} - \frac{x^3}{3!} + \frac{x^5}{5!} - \cdots$
$\cos x = 1 - \frac{x^2}{2!} + \frac{x^4}{4!} - \frac{x^6}{6!} + \cdots$
$e^x = 1 + \frac{x}{1!} + \frac{x^2}{2!} + \frac{x^3}{3!} + \cdots$
$n! = n(n-1)(n-2)\cdots 2 \cdot 1$
$180° \to \pi$
$\theta° \times \frac{\pi}{180°}$
a^x
$y = f(x)$
$g(x)$
A (3, 4)
B (2, -1)
(x, y)
Cartesian Coordinates
卡氏座標

4. 極限
5. 微分
6. 積分
$\theta = \frac{s}{r}$ radian
$\theta = 360^\circ \rightarrow \frac{2\pi r}{r} = 2\pi$
$180^\circ \rightarrow \pi$
$90^\circ \rightarrow \pi/2$
rad
$\sqrt{-1}$
$z_1 = a + bi$
$z_2 = c + di$
$x \rightarrow \sqrt{-1} \equiv i \leftarrow$ 虛數
$i^2 = -1$
$z_1 + z_2 = (a+c) + (b+d)i$
$z_1 - z_2 = (a-c) + (b-d)i$
$z_1 z_2 = z_2 z_1 = ac + (ad+bc)i + bd\,i^2 = (ac-bd) + (ad+bc)i$
$\sin x = \frac{x}{1!} - \frac{x^3}{3!} + \frac{x^5}{5!} - \cdots$
$\cos x = 1 - \frac{x^2}{2!} + \frac{x^4}{4!} - \frac{x^6}{6!} + \cdots$
$e^x = 1 + \frac{x}{1!} + \frac{x^2}{2!} + \frac{x^3}{3!} + \cdots$
$n! = n(n-1)(n-2)\cdots 2 \cdot 1$
$180^\circ \rightarrow \pi$
$\theta^\circ \times \frac{\pi}{180^\circ}$
$a^{x_1} a^{x_2} = a^{x_1 + x_2}$
$y = f(x) : x \rightarrow f(x)$
$\sin(x) : x \rightarrow \sin(x)$
$f(x) = ax + b$
$P(x,y)$
$A\ (3,4)$
$B\ (2,-1)$
(x, y)
Cartesian Coordinates
卡氏座標



4. 極限
5. 微分
6. 積分
θ = s/r radian
θ = 360° → 2πr/r = 2π
180° → π
90° → π/2
rad
√-1
sinθ = y/r = a/c
cosθ = x/r = b/c
tanθ = y/x = a/b
x = r cosθ
y = r sinθ
f(x) = e^x
sin x = x/1! − x³/3! + x⁵/5! − …
cos x = 1 − x²/2! + x⁴/4! − x⁶/6! + …
e^ix = cos x + i sin x
Euler's formula
e^iθ = cos θ + i sin θ
x ⇒ √-1 ≡ i ← 虛數
i² = −1

f(x) = e^x
arc
Euler's formula
radian
e^x → exp(x)
exponent
complex number
x^3 − x − 1 = 0
Plastic number
Pisot number
SPAIN
THIS