

,

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## 1

- ( ) ( ) μ .
- $\alpha \cdot \beta = \alpha, \quad \beta = 1$
- $\alpha \cdot \beta = 0, \quad \alpha = 0 \quad \beta = 0$
- $\alpha \cdot \beta \neq 0, \quad \alpha \neq 0 \quad \beta \neq 0$
- μ μ  $\alpha \neq 0, \quad (\alpha^{-2})^0 = 1$
- μ μ  $\alpha \neq 0, \quad \alpha^{-3} \cdot \alpha^2 = \frac{1}{\alpha}$  ( 10)
- μ .
- $(x - \dots)^2 = \dots - 4x + \dots$
- $(x - \dots)^3 = x^3 - 3x^2 + 3x - \dots$
- $\alpha + \beta + \gamma = 0, \quad \alpha^3 + \beta^3 + \gamma^3 = \dots$
- $\alpha^2 + \dots = (\alpha + 1)^2 - 2\alpha$
- $\alpha < \beta \Leftrightarrow \alpha \cdot \gamma \dots \beta \cdot \gamma, \quad \gamma < 0$  ( 15)

## 2

- :
- $\frac{x^3 \alpha - x \alpha^3}{x^2 \alpha + x \alpha^2} \quad \cdot \quad \frac{(x-2) \cdot (x-4) - (2-x) \cdot (x-6)}{x^2 - 4} \quad \cdot \quad \frac{x^3 + 4x^2 + 3x}{x^2 + x}$  ( 9)
- $(x^2 - 4) \cdot (2x - 1) = (x + 2) \cdot (2x - 1)^2$  ( 10)
- $A = 4\alpha(4\alpha - 5) + 3\beta(3\beta + 5) - 24\alpha\beta$   
μ μ ,  $: 4\alpha - 3\beta = 7$  ( 6)

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•  $\mu$  ,  $2(\alpha^2 + \beta^2) \geq (\alpha + \beta)^2$  ( 5)

• :

$\frac{x+5}{4} - \frac{x-3}{6} \geq \frac{x}{3}$   $\frac{7-3x}{12} + \frac{3}{4} < 2(x-2) + \frac{5(5-2x)}{6}$  ( 12)

•  $x$ ,  $\lambda x + \lambda^2 = 16 - 4x$   $\mu$  ( 8)

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•  $\mu$   $(\lambda^2 - 4)x = \lambda^2 - 2\lambda$   $\mu$  ( 15)

•  $\mu$   $\frac{\lambda}{2}(\lambda x + 3) = \frac{\lambda^2}{4} + \lambda x + 2$

•  $\mu$  ;

•  $\mu$   $\mu$  ; ( 10)