ΠΡΑΞΕΙΣ ΣΤΙΣ ΙΣΟΤΗΤΕΣ ΚΑΙ ΤΙΣ ΑΝΙΣΟΤΗΤΕΣ

1	$\alpha = \beta \Leftrightarrow \alpha + \gamma = \beta + \gamma$	$\alpha > \beta \Leftrightarrow \alpha + \gamma > \beta + \gamma$
2	$\alpha = \beta \Leftrightarrow \alpha\,\gamma = \beta\,\gamma\,,\ \gamma \neq 0$	$\alpha > \beta \Leftrightarrow \alpha\,\gamma > \beta\,\gamma\,,\ \gamma > 0$ $\alpha > \beta \Leftrightarrow \alpha\,\gamma < \beta\,\gamma\,,\ \gamma < 0$
3	$\alpha = \beta$ και $x = y$ $\Rightarrow$ i) $\alpha + x = \beta + y$ ii) $\alpha - x = \beta - y$ iii) $\alpha\,x = \beta\,y$ iv) $\frac{\alpha}{x} = \frac{\beta}{y}\,,\ x\,y \neq 0$	$\alpha > \beta$ και $x > y$ $\Rightarrow$ i) $\alpha + x > \beta + y$ ii)**ΔΕΝ ΑΦΑΙΡΟΥΜΕ ΑΝΙΣΩΣΕΙΣ** iii) $\alpha\,x > \beta\,y\,,\ \alpha, \beta, x\,, y > 0$ iv) **ΔΕΝ ΔΙΑΙΡΟΥΜΕ ΑΝΙΣΩΣΕΙΣ**
4	$\alpha = \beta \Leftrightarrow \alpha^{\nu} = \beta^{\nu}\,,\ \alpha,\beta \geq 0,\ \nu \in N^{*}$	$\alpha > \beta \Leftrightarrow \alpha^{\nu} > \beta^{\nu}\,,\ \alpha,\beta > 0,\ \nu \in N^{*}$
5	$\alpha = \beta \Leftrightarrow \sqrt[\nu]{\alpha} = \sqrt[\nu]{\beta}\,,\ \alpha, \beta \geq 0,\ \nu \in N^{*}$	$\alpha > \beta \Leftrightarrow \sqrt[\nu]{\alpha} > \sqrt[\nu]{\beta}\,,\ \alpha, \beta > 0,\ \nu \in N^{*}$
6	$\alpha = \beta \Leftrightarrow \frac{1}{\alpha} = \frac{1}{\beta}\,,\ \alpha\,\beta \neq 0$	$\alpha > \beta \Leftrightarrow \frac{1}{\alpha} > \frac{1}{\beta}\,,\ \alpha\,\beta < 0$ $\alpha > \beta \Leftrightarrow \frac{1}{\alpha} < \frac{1}{\beta}\,,\ \alpha\,\beta > 0$