Algebra 22 Abstract Inequalities

Example 1

Prove that a + b $\geq $ 2$\sqrt{ab}$ a , b $\in $ R

Example 2

Prove that a3 + b3 $\geq $ a2b + ab2  a , b $\in $ R

Question 1

Prove that (p + q)($\frac{1}{p}+ \frac{1}{q}$) $\geq $4. p, q $\in $ R

Question 2

Prove that $\frac{a}{b^{2}}$ + $\frac{b}{a^{2}}$ $\geq $ $\frac{1}{a}+ \frac{1}{b}$ a , b $\in $ R