Answer on Question #46068 – Math – Algebra

Given a, b > 0 such that ab = 18, check whether their sum is greatest when a = b

Solution.

If a and b are equal, then their values are $3\sqrt{2}$ and their sum $a+b=6\sqrt{2}$.

Consider example . Let $a=6,b=3$. Evidently $a>0,b>0,ab=18$,but $a+b=6+3=9>6\sqrt{2}$

So, the

Answer : The sum is not the greatest when $a=b$.