

ON SHAFER–FINK INEQUALITIES

LING ZHU

Abstract. In this paper, a new upper bound for inverse sine is established. We would point out that the numbers, 3 and π , 6 and $\pi(\sqrt{2} + \frac{1}{2})$, in Shafer-Fink inequalities, are optimal.

Mathematics subject classification (2000): 26D15.

Key words and phrases: inverse sine; upper and lower bounds; Shafer-Fink inequalities.

REFERENCES

- [1] D. S. MITRINOVIĆ, *Analytic Inequalities*, Springer-Verlag, 1970.
- [2] A. M. FINK, *Two Inequalities*, Univ. Beograd. Publ. Elektrotehn. Fak., **6**, (1995), 49–50.