Handbook Series Methods of Approximation

Correction to
Rational Chebyshev Approximation Using Interpolation

Contributed by
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In a previous paper [1] an algorithm was given for the evaluation of a rational function approximating a given function in the sense of Chebyshev. However, the program given there should be slightly changed in order to handle correctly certain nearly degenerate cases:

On p.184: line 17 from below should read

$xx[0] := z2; \quad err[0] := z3 \times u; \quad \text{go to } change$

instead of

$xx[0] := z2; \quad err[0] := z3 \times u$

On p.185, lines 4—8 from above should read

$xx[n] := z2; \quad err[n] := z3 \times u; \quad \text{go to } change$

end

end;

go to *check*;

change: $lb := -lb; \quad z := z3 - z;$

instead of:

$xx[n] := z2; \quad err[n] := z3 \times u$

end

end

else go to *check*;

$lb := -lb; \quad z := z3 - z;$

References

1. CODY, W. J., and J. STOER: Handbook series methods of approximation. Rational Chebyshev approximation using interpolation. Num. Math. **9**, 177—188 (1966).

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