RETTEMAL MA1101 HØST 2024

Total of 70 points possible, 10 per problem. Minor computational mistakes that do not affect the overall problem are not penalized. Correct answers that directly contradict earlier statements will not be awarded points. E.g. when getting a sketch from a graphing calculator or guessing at a limit from calculator values. The distribution of points is as follows:

- (1) 1p per correct true/false
- (2) Intervals $(2\mathbf{p})$, asymptotes $(3\mathbf{p})$, min value $(2\mathbf{p})$, sketch $(3\mathbf{p})$.
- (3a) Finding the correct derivatives (2p), writing down the correct polynomial from the derivatives (2p)
- (3b) Identifying that $|R_3(\frac{1}{2})|$ bounds the error (**2p**), showing that it indeed is smaller than 0.03125 and giving an estimate that satisfies the condition(**4p**).
- (4) a): **3p**, b): **3p**, c): **4p**, partial points for partial progress.
- (5) a): **3p**, b): **3p**, c): **4p**, partial points for partial progress.
- (6) a): **3p**, b): **3p**, c): **4p**, partial points for partial progress.
- (7) a): **4p**, b): **6p**, partial points for partial progress.

Grade limits:

f: 0-28 e: 29-36 (\geq 41%) d: 37-45 (\geq 53%) c: 46-53 (\geq 65%) b: 54-61 (\geq 77%) a: 62-70 (\geq 89%)