

# Calculus 1A: Homework Assignments. Notes and Hints.

Revised 1/27/09

Spring 2009, TT 3:30pm - 5:00pm, Room 105 Stanley Hall

Instructor: Professor Zvezdelina Stankova

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## HW2. Read §1.5-1.6, §2.2-2.5. Solve and Write Problems:

- (1) §2.2: #6,8,12,14,18,32,38(a)-(b).
- (2) §2.3: #2,4,14,20,26,28,32(b)(c),42,48. Justify with LLs and/or whatever PSTs (Problem Solving Techniques) you use!
  - (a) #26: put under a common denominator first.
  - (b) #28: rewrite as fractions, put under a common denominator.
  - (c) #32(b)(c): ignore the graphing part in (a), calculators are OK in (b), but list your table carefully.
  - (d) #42: find the LH-limit and the RH-limit, and compare.
- (3) §2.4: #2,4,9,11,13,14,18,24,26.
  - (a) #9: use calculator and list your numerical findings.
  - (b) #11(a): use the formula  $\pi r^2$ .
- (4) §2.5: #4,6,38,42,43(a)-(b).
  - (a) #42: for which  $a$  and  $b$  are the corresponding LH- and RH-limits equal? Note that there is a typo in the textbook:  $2 < x < 3$  should be  $2 \leq x < 3$ .
  - (b) #43: justify your answers and include all calculations!