

# MATH 151 Homework 19

Due 4/3

Read Section 4.7.

Do Section 4.2 Exercise 32

Do Section 4.3 Exercise 6, 28, 32, 56

Also, do the following exercises.

**SF44.** For positive constants  $A$  and  $B$ , the force between two atoms in a molecule is given by

$$f(r) = \frac{-A}{r^2} + \frac{B}{r^3}$$

where  $r > 0$  is the distance between the atoms. What value of  $r$  minimizes the force?

**SF45.** Find the point on the parabola  $y^2 = 2x$  that is closest to the point  $(1, 4)$ .