

Math 1210-2

Tuesday October 23

Max-min examples, §3.4

We still have exercises 2b, 3 from Monday.

After those:

Exercise 1 Find the points on the parabola $y=x^2$ closest to $(0,5)$.

Exercise 2. Derive Snell's Law (for light) as the solution to the following minimization problem:

Suppose a particle can travel at speed c_1 in medium 1, above the x -axis
& at speed c_2 in medium 2, below the x -axis.

If the particle wishes to get from (x_1, y_1) ($y_1 > 0$) to (x_2, y_2) ($y_2 < 0, x_2 > x_1$)
in the shortest amount of time, which path should it take?
(use back of page!).

