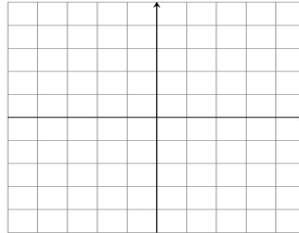# Taxicab Geometry Worksheets
Exploring Mathematics, Spring 2010

Day 1: Taxicab Distances

1. (a) Graph the points $A = (1, 3)$, $B = (1, -2)$, $C = (-3, -1)$, and $D = (0, 3)$.

   (b) Now find the following distances in both Euclidean and taxicab geometries. Give a decimal approximation to 2 decimal places.

	Euclidean distance	Taxicab distance
from A to B		
from B to C		
from C to D		

   (c) If you know the Euclidean distance between two points, does that tell you what the taxicab distance is? Why or why not?

   (d) If you know the taxicab distance between two points, does that tell you what the Euclidean distance is? Why or why not?