

John Cocharo's Problems on Lattice Polygons

October 17, 2000

1. Find the area of the triangle with coordinates $(1, 1)$, $(1, 2)$, and $(3, 1)$.
2. Find the area of the trapezoid with in order the coordinates of $(1, 1)$, $(2, 1)$, $(3, -1)$, and $(1, -1)$.
3. Find the area of the polygon with in order the coordinates of $(1, 1)$, $(3, 3)$, $(2, 0)$, $(0, -4)$, $(-3, 0)$, and $(-1, 4)$.
4. Find the area of the polygon with in order the coordinates of $(0, 5)$, $(2, 0)$, $(7, 0)$, $(3, -1)$, $(4, -7)$, $(0, -2)$, $(-4, -7)$, $(-3, -1)$, $(-7, 0)$, and $(-2, 0)$.