

#ret

---

## 1 | For tomorrow, think about the questions we raised in class:

**Does a piece that can move up/down or diagonally with a slope of 1 get to anywhere on the plane?**

Yes. It can move to any point on the y axis from any point on the y axis, and can move to any point on the x axis by creating a independent x axis move with one over diagonally and one down.

**What other possible move choices will allow a piece to go anywhere on the plane?** Any move sequence which can create an orthogonal move by one unit. E.G. Knight:  $2x+1y, 1y-2x, 1x-2y = 2x-2x+x+y+y-2y = x$

**What about in THREE SPACE??** Should be able to just expand to higher dimensional spaces..

**For next MONDAY, read 1.C!**