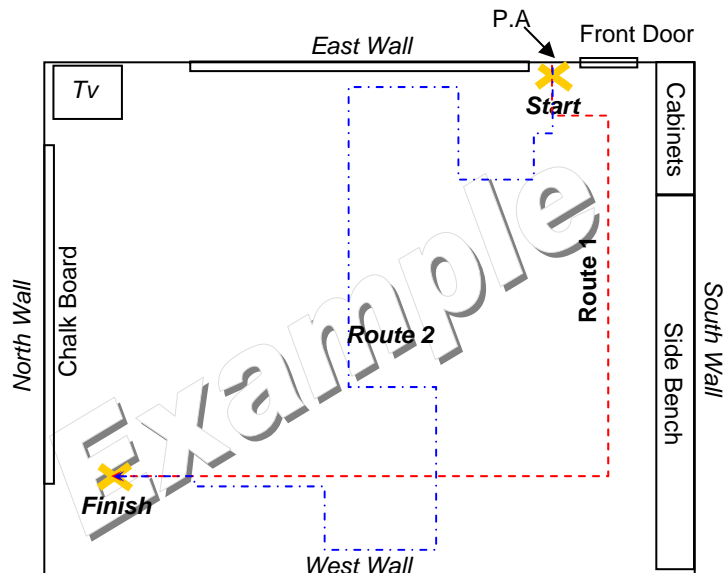
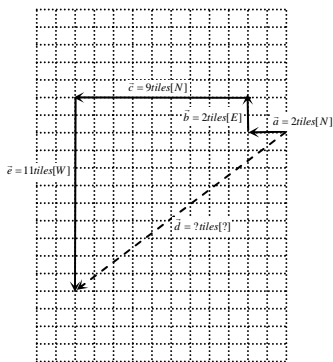


**Activity:** There are two **X**'s on the floor, one in front of the **P.A.** and one by the teacher's desk.



- Only using north, south, east, and west, determine two **unique** paths to the **finish** by counting tiles.
- Draw a scale diagram using graph paper. Let one square on the graph paper represent one tile on the floor.
- For each straight run, **Label** each as a vector using  $\vec{a}$ ,  $\vec{b}$ ,  $\vec{c}$  except **don't** use  $\vec{d}$ ; that's reserved for displacement.



- Determine the scale of the diagram. Ensure you measure the tiles in **cm**.
- Find the **actual** distance and displacement for both routes. The answers should be in **cm**.
- **Show all your work**
- Use proper vectors notation for your magnitude and angles (eg. 10cm [N20°E])

