

Figure 1: Example

Given three points in the x,y plane, a, b, and c, and given an arrow from a to b and an arrow from b to c, we want to know whether the second arrow "turns right" or "turns left" or "goes straight" with respect to the first arrow.



If the determinant of this matrix is positive, it is a left turn. If the determinant is negative, it is a right turn. If the determinant is zero, the three points are collinear.



Figure 2: Turns