**Coordinates Geometry**

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| 1 | Distance between 2 points (2D)  Distance between 2 points (3D) |  |
| 2 | Midpoint of 2 points (3D) |  |
| 3 | Slope of 2 points |  |
| 4 | Line Equation (we need the “slope” value and y-intercept) |  |
| 5 | Check if 2 lines are perpendicular |  |
| 6 | For Equation of the perpendicular Bisector of AB (A line equation that is perpendicular to Line AB) | Get a point reside on line AB, midpoint is the easiest solution : midpoint of AB  Get slope of line AB :  Get perpendicular slope of AB = |
| 7 | Ratio Theorem |  |
| 8 | Area of Polygon |  |