

Geometry Unit 6: Analytic Geometry

Bronx Early College Academy

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7 December 2022 - 13 January 2023

6.1 Midpoint formula

8 December

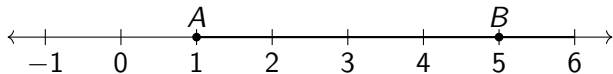
Learning Target: I can plot a midpoint on the plane

HSG.CO.C.9 Prove theorems about lines and angles

6.1 Wednesday 8 December

Do Now

1. Review your Jumprope grades
2. Find the midpoint M of \overline{AB}



Lesson: Midpoint and average, classwork practice

Homework: Deltamath classwork practice

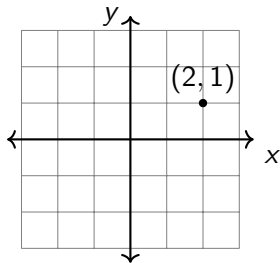
What do you know about the coordinate plane?

Coordinates Values locating a point on a plane (x, y)

Axis The two number lines, x and y -axis

Origin The center of the plane, $(0, 0)$

Quadrant The four quarters of the plane



The midpoint formula

Given $A(x_A, y_A)$, $B(x_B, y_B)$, midpoint

$$M = \left(\frac{x_A + x_B}{2}, \frac{y_A + y_B}{2} \right)$$

