

CCSS of Mathematical Practices	Appropriate Accommodations & Connections
1: Make sense of problems and persevere in solving them.	Vary pacing of lessons with enough time allowed for feedback. Offer anchor and sponge activities for independent and cooperative work that allows for further exploration and application; e.g., centers.
2: Reason abstractly and quantitatively.	Ask students to paraphrase their understandings. Have prepared strategy tables with the appropriate manipulatives that represent and solidify abstract concepts; e.g., hundred's charts, base-ten blocks, tangrams, fraction circles, algebra tiles.
3: Construct viable arguments, and critique the reasoning of others.	Encourage think-aloud Socratic math discussions, math debates, and ongoing dialogue in a nonthreatening classroom environment. Have prepared questions related to specific problems with partial solutions for those students who need help to formulate questions or extract information.
4: Model with mathematics.	Connect the math to school, home, and community contexts and students' interests when possible.
5: Use appropriate tools strategically.	Provide opportunities to <i>play with the math</i> , with concrete and virtual manipulatives; e.g., NCTM, <i>Illustrative Math</i> .
6: Attend to precision.	Offer structured rules and procedures on math cue cards for students with organizational, sequencing, or processing difficulties. Emphasize how math is similar to writing and requires proofreading and revisions to see if all was accurately completed. Offer rubrics that outline requirements.
7: Look for and make use of structure.	Present a set of problems that students sort into similar categories to see patterns. Allow students ample time to formulate conclusions.
8: Look for and express regularity in repeated reasoning.	Invite students to continually ask, if their answer makes sense. Encourage peer discussions.

Source reviewed: National Governors Association Center for Best Practices and Council of Chief State School Officers, 2010.

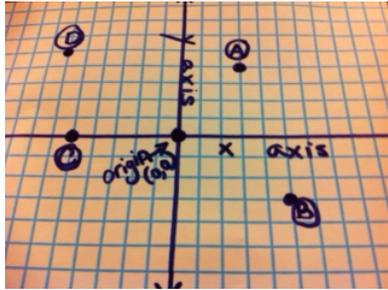
Common Core State Standards Initiative at <http://www.corestandards.org/the-standards/mathematics>

5th grade

Geometry 5.G

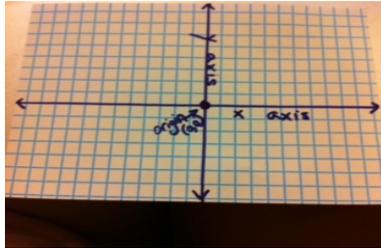
Graph points on the coordinate plane to solve real-world and mathematical problems.

1. Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g., *x*-axis and *x*-coordinate, *y*-axis and *y*-coordinate).



1. Know these definitions:

- origin= point where the x and y axes cross
- x-axis = line that goes across from left to right across the origin
- y-axis = line that goes from up to down across the origin
- coordinates= set of values that have an exact position with an ordered pair (x, y)



2. Plot your own points on graph paper by counting how many spots you move across from the origin to plot the *x* coordinate. The right side of the origin is positive and the left side of the origin is negative. Then move either up or down to plot the *y* coordinate. Moving above the *x*-axis gives the *y* coordinate a positive value and moving below the *x*-axis gives the *y* coordinate a negative value.

Look at the *x*, *y* coordinates of points A, B, C, D to see examples. Always start your counting at the origin.

A= (3, 4) moving 3 across and then 4 up

B= (5, -3) moving 5 across and then 3 down

C= (-5, 0) moving 5 points to the left and then staying on the *x*-axis.

D= (-6, 5) moving 6 spots to the left and then 5 spots above the *x*-axis.