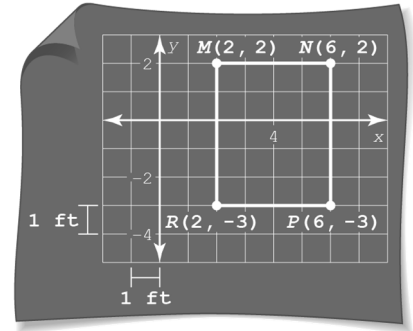


Chapter 1 Basics of Geometry

Dear Family,

Have you ever needed to measure angles or find an area or a perimeter in everyday life? Sure, we all have! These are the foundations of geometry. In Chapter 1, your student will be learning how to use these building blocks to solve complex problems in the real world. Whether it's simple home remodeling or a full-fledged career in architecture, geometry is one area of mathematics your student will most certainly use again!



Many careers today require the skills learned in geometry. Contractors work with measurements. Physicists use angles. Architects draw blueprints for houses and buildings. Have you ever discussed with your student what his/her profession might be someday? Now is a great time to start considering how geometry might make them more successful in a future career.

Take some time with your student to talk about what he/she would like to do someday. Record a few ideas, and then spend a few minutes researching how geometry might fit in!

Architect	Architects use measurements, angles, and lengths to draw blueprints.

Discuss the different professions with your student.

- What would be the advantages of good geometry skills for each profession?
- What would be the disadvantages of poor geometry skills for each profession?

Helping your student see the value of learning basic skills of geometry in real life will motivate them to master these concepts with excellence. It may even open up worlds of opportunity for a future career!

Chapter 1 Basics of Geometry (continued)

	Learning Target	Success Criteria
Chapter 1 Basics of Geometry	Understand basics of geometry.	<ul style="list-style-type: none"> I can name points, lines, and planes. I can measure segments and angles. I can use formulas in the coordinate plane. I can construct segments and angles.
1.1 Points, Lines, and Planes	Use defined terms and undefined terms.	<ul style="list-style-type: none"> I can describe a point, a line, and a plane. I can define and name segments and rays. I can sketch intersections of lines and planes.
1.2 Measuring and Constructing Segments	Measure and construct line segments.	<ul style="list-style-type: none"> I can measure a line segment. I can copy a line segment. I can explain and use the Segment Addition Postulate.
1.3 Using Midpoint and Distance Formulas	Find midpoints and lengths of segments.	<ul style="list-style-type: none"> I can find lengths of segments. I can construct a segment bisector. I can find the midpoint of a segment.
1.4 Perimeter and Area in the Coordinate Plane	Find perimeters and areas of polygons in the coordinate plane.	<ul style="list-style-type: none"> I can classify and describe polygons. I can find perimeters of polygons in the coordinate plane. I can find areas of polygons in the coordinate plane.
1.5 Measuring and Constructing Angles	Measure, construct, and describe angles.	<ul style="list-style-type: none"> I can measure and classify angles. I can construct congruent angles. I can find angle measures. I can construct an angle bisector.
1.6 Describing Pairs of Angles	Identify and use pairs of angles.	<ul style="list-style-type: none"> I can identify complementary and supplementary angles. I can identify linear pairs and vertical angles. I can find angle measures in pairs of angles.