

Mathematics For Families

You Are Your Child's First Teacher. Learn how to support the goals of Washington's academic standards and why they are important to your child. When schools and families work together as partners, it helps your child achieve academic success!

8

Eighth Grade

In eighth grade, students deepen their understanding of how math connects to real life. Eighth-graders use tools such as graphs, equations, and pictures to solve meaningful problems, such as comparing cell phone plans, analyzing trends in community data, or interpreting changes over time. Throughout the year, students build confidence as they investigate why mathematical rules work, justify their thinking, prove their ideas, and develop problem-solving skills they can use in high school, future careers, and their daily lives.

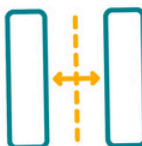


Below is a snapshot of what your student will learn in math this year and how you can support them in school and at home.

What Eighth-Graders Learn and Do



Use linear equations to make sense of real-life situations. Graph equations to see how different relationships look on a graph.



Explore how two things can be related, like using distance and time to measure speed, and use linear equations to describe patterns in data.



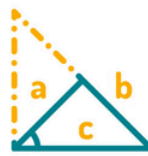
Understand that a function shows how one amount depends on another and how this idea applies to real-life situations (*for example, how pay increases with the amount of hours worked*).



Solve geometry problems using ideas about distance, angles, and transformations like sliding, flipping, turning, and resizing.



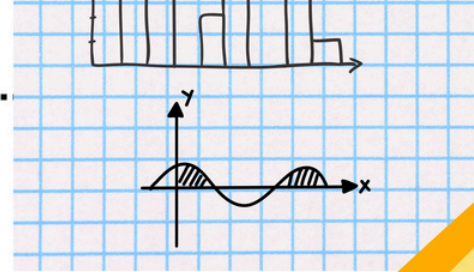
Learn how angles relate to each other when lines cross or run parallel. Use this information to solve problems involving missing angles.



Explore the Pythagorean Theorem and use it to solve real-world problems.



Washington Office of Superintendent of
PUBLIC INSTRUCTION



How to Support Your Eighth-Grader with Math

Do Math at Home

- Look at simple graphs in news articles, weather apps, or specific areas of interest (such as sports stats). Ask your student what they notice or what information is being shown.
- When making decisions (such as what to buy at the grocery store or the best travel route), ask your student which choice seems better and why.

- Ask your student how patterns, angles, speed, or timing show up in their favorite activities like drawing, music, sports, for gaming.
- Ask your student to make estimates in real-world situations:

“How long do you estimate this task will take?”

“Which option is the better deal?”

“What’s a reasonable total for this grocery order before tax?”

Talk with Your Student

- Explain that mistakes are part of learning. Remind your student that revising their thinking is an important part of becoming a stronger problem solver.
- Invite your student to explain how they solve problems. Encourage them to ask questions when something is not clear or does not make sense.
- Reward and praise your student for figuring something out (problem solving), even when it does not relate to math.
- Support your student to talk with their teacher if they have questions about math or don’t understand something in class. Help them plan out what they will say.
- Check in with your student while they do homework. Ask if they need any support. Encourage them to consider what resources they can use to help themselves.
- Talk about how math connects to their future goals and what courses they may need to take in high school.

Partner with the School

- Ask your student’s teacher what to expect in high school and if there are placement exams your student should be aware of or courses they recommend.
- Discuss collaboration with the teacher. Ask how students work with others to support learning.
- Help your student identify their strengths in math and areas where they feel confident. Share this information with the teacher.
- Ask the teacher how they encourage students to explain their thinking, make choices, and learn from mistakes in math class.
- Ask the teacher how students are using their math skills to understand and solve real-world problems.
- If you have questions, or if your student needs extra help or is new to learning English, talk to your student’s teacher, multilingual learner specialist, or individualized education program (IEP) team (if applicable).

