

FOCUS AREAS FOR SEVENTH GRADE:

- ▶ Solve real-world problems using ratios, rates, and proportions. For example, find how much tax will be charged on a new phone.
- ▶ Understand and use rational numbers (positive and negative fractions). For example, track the depth, in miles, of a submarine over time.
- ▶ Solve problems involving a circle's area, radius (distance from center to edge), and circumference (distance around the edge).
- ▶ Compare two sets of data. For example, compare the heights of players on two basketball teams.



BY THE END OF SEVENTH GRADE, STUDENTS CAN:



- ▶ Explain the concepts of unit rate and proportion.
- ▶ Add, subtract, multiply, and divide positive and negative fractions.
- ▶ Explain connections between addition, subtraction, and negative numbers.
- ▶ Rearrange math sentences (equations) using variables: for example, change $4x + 2 = 10$ to $2(2x + 1) = 10$.
- ▶ Write equations and inequalities to solve real-life problems: for example, write $20h = 500$ to find how many hours someone needs to work at \$20 an hour to get \$500.
- ▶ Make scale drawings of geometric figures, changing their size without changing their shape.
- ▶ Use knowledge of special types of angles (like supplementary, vertical, and adjacent angles) to find the size of an unknown angle.
- ▶ Explain how and why to use a sample population in research.
- ▶ Compare the probabilities of two events using a scale from 0 (definitely not going to happen) to 1 (definitely going to happen).
- ▶ Find the probabilities of events that depend on one another to happen (are compound).

QUESTIONS YOU CAN ASK YOUR CHILD:

- ▶ How far can we drive with half a tank of gas?
- ▶ How can we hang the clock in the center of this wall?
- ▶ What's the probability of picking a 9 from a deck of cards?

TOPICS YOU CAN DISCUSS WITH YOUR CHILD'S TEACHER:

- ▶ Ways to practice using proportions at home
- ▶ How your child is preparing for algebra

