

Lesson 17: Fraction Multiplication and Division Situations

- Let's solve problems involving multiplying and dividing fractions.

Warm-up: Number Talk: Multiply and Divide

Find the value of each expression mentally.

- $5 \div \frac{1}{6}$

- $5 \times \frac{1}{6}$

- $\frac{1}{5} \div 6$

- $\frac{1}{5} \times \frac{1}{6}$

17.1: Info Gap: Tiles

Your teacher will give you either a problem card or a data card. Do not show or read your card to your partner.

If your teacher gives you the *problem card*:

1. Silently read your card and think about what information you need to answer the question.
2. Ask your partner for the specific information that you need.
3. Explain to your partner how you are using the information to solve the problem.
4. Solve the problem and explain your reasoning to your partner.

If your teacher gives you the *data card*:

1. Silently read the information on your card.
2. Ask your partner, "What specific information do you need?" and wait for your partner to ask for information. Only give information that is on your card. (Do not figure out anything for your partner!)
3. Before telling your partner the information, ask, "Why do you need that information?"
4. After your partner solves the problem, ask them to explain their reasoning and listen to their explanation.

Pause here so your teacher can review your work. Ask your teacher for a new set of cards and repeat the activity, trading roles with your partner.

17.2: Multiplication or Division

Solve each problem. Explain or show your reasoning.

1. If 11 grains of rice weigh $\frac{1}{3}$ gram, how much does each grain of rice weigh?

2. Mai's road is $\frac{9}{10}$ mile long. She ran $\frac{3}{4}$ of the length of her road. How far did she run?

3. If each tennis ball weighs $2\frac{1}{16}$ ounces, how much do 9 tennis balls weigh?