

LESSON 20: Multiply Fractions

TRANSPARENCY MASTER for S202

Directions: Complete the following SOLVE problem with your teacher.

Danielle is working on a design for her art project. The design is made up of rectangles and triangles. There are a total of 24 rectangles in the design, and each rectangle has a width of $\frac{1}{2}$ -inch and a length of $\frac{3}{4}$ -inch. What is the area of each of the rectangles?

S Underline the question.

This problem is asking me to find _____
_____.

O Identify the facts.

Eliminate the unnecessary facts.
List the necessary facts.

L Choose an operation or operations.

Write in words what your plan of action will be.

V Estimate your answer.

Carry out your plan.

E Does your answer make sense? (Compare your answer to the question.)

Is your answer reasonable? (Compare your answer to the estimate.)

Is your answer accurate? (Check your work.)

Write your answer in a complete sentence.

LESSON 20: Multiply Fractions

Here is the key to **S202**.

Directions: Complete the following SOLVE problem with your teacher.

~~Danielle is working on a design for her art project. | The design is made up of rectangles and triangles. | There are a total of 24 rectangles in the design, | and each rectangle has a width of $\frac{1}{2}$ -inch | and a length of $\frac{3}{4}$ -inch. | What is the area of each of the rectangles?~~

S Underline the question.

This problem is asking me to find **the area of each rectangle**.

O Identify the facts.

Eliminate the unnecessary facts.

List the necessary facts. **Width of $\frac{1}{2}$ -inch, length of $\frac{3}{4}$ -inch**

L Choose an operation or operations. **Multiplication**

Write in words what your plan of action will be. **Multiply the width of the rectangle and the length of the rectangle.**

V Estimate your answer. **Less than 1 square inch**

Carry out your plan.

$$\frac{1}{2} \bullet \frac{3}{4} = \frac{3}{8} \text{ inches squared}$$

E Does your answer make sense? (Compare your answer to the question.) **Yes, because we are looking for the area of each rectangle.**

Is your answer reasonable? (Compare your answer to the estimate.) **Yes, because it is close to our estimate of less than 1 square inch.**

Is your answer accurate? (Check your work.) **Yes.**

Write your answer in a complete sentence. **Each rectangle has an area of $\frac{3}{8}$ inches squared.**