

Which Task is the Most Worthwhile?

1) To Multiply or Not To Multiply

Some of the problems below can be solved by multiplying $1/8 \times 2/5$, while others need a different operation. Select the ones that can be solved by multiplying these two numbers. For the remaining, tell what operation is appropriate. In all cases, solve the problem (if possible) and include appropriate units in the answer.

- Two-fifths of the students in Anya's fifth grade class are girls. One-eighth of the girls wear glasses. What fraction of Anya's class consists of girls who wear glasses?
- There is $2/5$ of a pizza left. If Jamie eats another $1/8$ of the original whole pizza, what fraction of the original pizza is left over?
- In Sam's fifth grade class, $1/8$ of the students are boys. Of those boys, $2/5$ have red hair. What fraction of the class is red-haired boys?
- Only $1/20$ of the guests at the party wore both red and green. If $1/8$ of the guests wore red, what fraction of the guests who wore red also wore green?
- Alex was planting a garden. He planted $2/5$ of the garden with potatoes and $1/8$ of the garden with lettuce. What fraction of the garden is planted with potatoes or lettuce?
- At the start of the trip, the gas tank on the car was $2/5$ full. If the trip used $1/8$ of the remaining gas, what fraction of a tank of gas is left at the end of the trip?
- On Monday, $1/8$ of the students in Mr. Brown's class were absent from school. The nurse told Mr. Brown that $2/5$ of those students who were absent had the flu. What fraction of the absent students had the flu?
- $2/5$ of the students in a class are girls. $7/8$ of them love math. What fractions of the class are girls that do not love math?
- The track at school is $2/5$ of a mile long. If Jason has run $1/8$ of the way around the track, what fraction of a mile has he run?

2) Running to School

The distance between Rosa's house and her school is $3/4$ of a mile. She ran $1/3$ of the way to school. How many miles did she run?

3) Making Cookies

A recipe for chocolate chip cookies makes 4 dozen cookies and calls for the following ingredients:

- 1 $1/2$ Cup margarine
- 1 $3/4$ Cup sugar
- 2 teaspoon vanilla
- 3 $1/4$ Cup flour
- 1 teaspoon baking powder
- $1/4$ teaspoon salt
- 8 ounce chocolate chips

- How much of each ingredient is needed for 12 dozen cookies?
- How much of each ingredient is needed for 3 dozen cookies?