**To Multiply or Not To Multiply**: Some of the situations below can be represented by 1/8 x 2/5, while others need a different operation. Select the situations that can be represented by multiplying these two numbers. For the remaining, tell what operation is appropriate. In every case, justify your thinking.



1. 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?
2. 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?
3. 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?
4. 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?
5. 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?