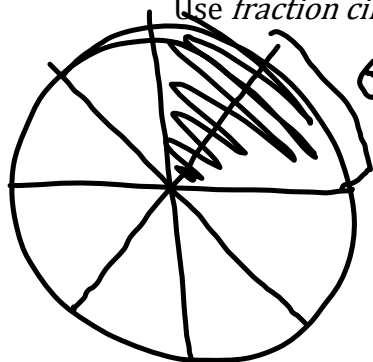


3.2 Using Models to Multiply Fractions

- One-quarter of a cherry pie was left over after dinner.
Graham ate one-half of the leftover pie for lunch the next day.

What fractions of the whole pie did he have for lunch?

Use *fraction circle* to demonstrate.



Graham
eats this

Graham ate
 $\frac{1}{8}$ of the pie

$$\frac{1}{2} \text{ of } \frac{1}{4}$$

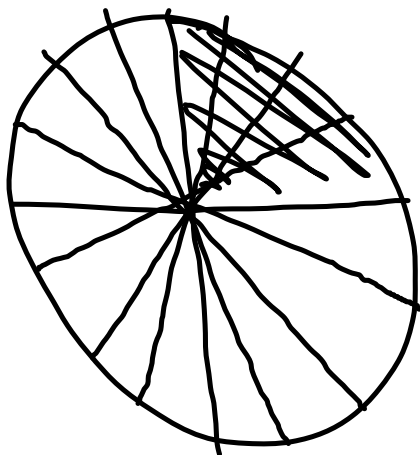
$$\frac{1}{2} \times \frac{1}{4}$$

$$\frac{1}{8}$$

What if Graham had eaten only one-quarter of the leftover pie.

What fraction of the whole pie would he have eaten?

Use *fraction circle* to demonstrate.



$$\frac{1}{4} \text{ of } \frac{1}{4}$$

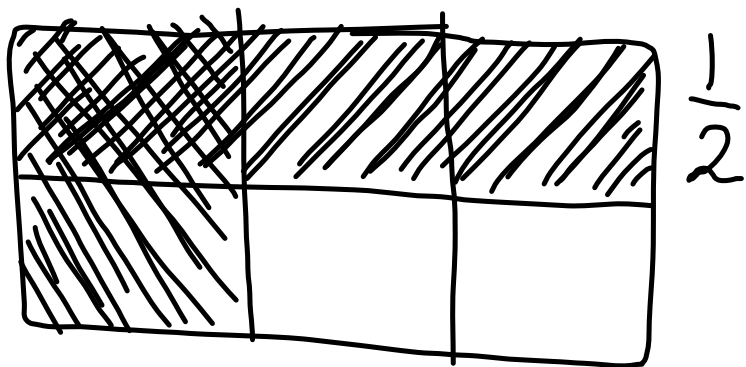
$$\frac{1}{4} \times \frac{1}{4}$$

$$\frac{1}{16}$$

He would have
eaten $\frac{1}{16}$ of the pie.

2. $\frac{1}{2}$ of the driveway was shoveled.
Julie shoveled $\frac{1}{3}$ of the snow cleared.

Use a rectangle to model the fraction Julie shoveled.

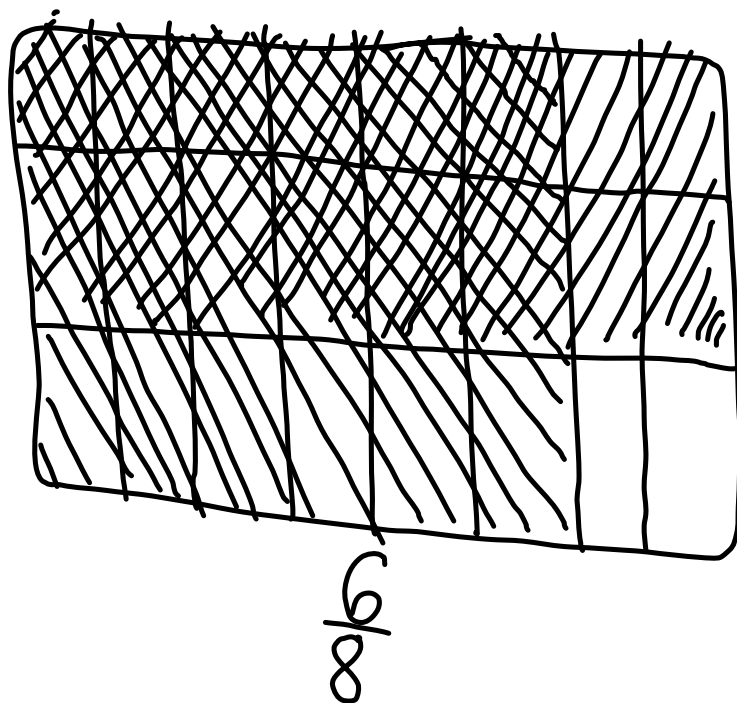


$$\frac{1}{3} \text{ "of"} \frac{1}{2}$$

$$\frac{1}{3} \times \frac{1}{2}$$

$$\frac{1}{6}$$

3. Multiply: $\frac{2}{3} \times \frac{6}{8} = \frac{12}{24} \div 12 = \frac{1}{2}$



$$\frac{1}{2}$$