

## 6.3

**Multiplying Proper Fractions***MathLinks 8, pages 210–215***Key Ideas Review***Choose from the following terms to complete #1 to #3.*

estimate

multiply

numerators

paper folding

- Two proper fractions can be multiplied using \_\_\_\_\_ or diagrams.
- A rule for multiplying two proper fractions is to multiply the \_\_\_\_\_ and \_\_\_\_\_ the denominators.
- You can \_\_\_\_\_ the product of two proper fractions by first deciding whether each fraction is closer to 0,  $\frac{1}{2}$ , or 1.

**Practise and Apply**

4. Estimate and calculate each product.  
Show your thinking and express your answer in lowest terms.

a)  $\frac{2}{3} \times \frac{5}{6}$

Circle the closest estimate: 0  $\frac{1}{2}$  1

b)  $\frac{4}{9} \times \frac{1}{5}$

Circle the closest estimate: 0  $\frac{1}{2}$  1

c)  $\frac{2}{5} \times \frac{3}{8}$

Circle the closest estimate: 0  $\frac{1}{2}$  1

d)  $\frac{2}{3} \times \frac{3}{5}$

Circle the closest estimate: 0  $\frac{1}{2}$  1

e)  $\frac{7}{8} \times \frac{3}{5}$

Circle the closest estimate: 0  $\frac{1}{2}$  1

f)  $\frac{9}{10} \times \frac{8}{9}$

Circle the closest estimate: 0  $\frac{1}{2}$  1

Name: \_\_\_\_\_

Date: \_\_\_\_\_

5. Tamara lives  $\frac{3}{4}$  km from school. She runs  $\frac{1}{3}$  of the distance and then walks the rest of the way to her house. How far does Tamara run? Show your thinking.

8. Vancouver's population is approximately  $\frac{2}{5}$  the population of Toronto. Québec City's population is approximately  $\frac{1}{3}$  of Vancouver's population. Compare Québec City's population to Toronto's population.

6. In a grade 8 class,  $\frac{1}{2}$  of the students play piano. Of these students,  $\frac{1}{4}$  also play guitar. What fraction of this class play both piano and guitar?



9. Hayden's hard drive is  $\frac{2}{5}$  filled. The operating system takes up  $\frac{1}{10}$  of that space. How much of the whole hard drive is filled by the operating system? Use a model to show your thinking.

7. On a Saturday, Sid helped his father do yard work for  $\frac{5}{6}$  of the afternoon. He mowed lawn for  $\frac{3}{5}$  of this time. What fraction of the afternoon did Sid spend mowing the lawn? Estimate, then solve.

Estimate:

Solution:

10. An order of bruschetta for 4 uses  $\frac{1}{3}$  of a loaf of French bread. How much of a loaf does each person get when they share the order equally?