## NAME

Module 6Computational Fluency of FractionsLesson 5Multiplying Fractions



One-sixth of the animals in the zoo walk on four legs. Two-fifths of these four-legged animals are tigers. What fraction of animals at the zoo are tigers?

 $\frac{1}{6} \times \frac{2}{5} = \frac{1 \times 2}{6 \times 5} = \frac{2}{30} = \frac{1 \times \cancel{2}^1}{15 \times \cancel{2}_1} = \frac{1}{15}$  $\frac{1}{15}$  of the animals are tigers.



Two-fifths of the students participating in the talent show have a partner. If there are fifteen students in the show, how many students have a partner?

 $\frac{2}{5} \times 15 = \frac{2}{5} \times \frac{15}{1} = \frac{30}{5} = \frac{6}{1} = 6$ 

Six students have a partner.



Seven-ninths of the books in the school library are fiction. Twelve-fifteenths of these fiction books are mystery novels. What fraction of the books in the school library are mystery novels?

 $\frac{7}{9} \times \frac{12}{15} = \frac{84}{135} = \frac{28 \times \cancel{3}^{1}}{45 \times \cancel{3}_{1}} = \frac{28}{45}$ 

 $\frac{28}{45}$  of the books are mystery novels.

Guided

**Practice** 

6.5



Fifteen-sixteenths of the members at Friendly Pool are adults. Four-ninths of these adults have children. What fraction of the members at Friendly Pool has children?

$$\frac{15}{16} \times \frac{4}{9} = \frac{15^{5}}{16_{4}} \times \frac{4^{1}}{9_{3}} = \frac{5}{4} \times \frac{1}{3} = \frac{5}{12}$$

 $\frac{5}{12}$  of the members at Friendly Pool have children.



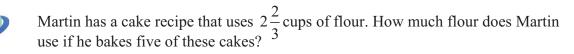
Set 3

Seven-eighths of Mr. Tu's students exercise after school. Four-sevenths of these students use free weights. What fraction of Mr. Tu's students uses free weights?

$$\frac{7}{8} \times \frac{4}{7} = \frac{7^{1}}{8} \times \frac{4^{1}}{7} = \frac{1}{2} \times \frac{1}{1} = \frac{1}{2}$$

## One-half of Mr. Tu's students use free weights.

## One-nan of wir. Tu 5 students use new



$$2\frac{2}{3} \times 5 = \frac{8}{3} \times \frac{5}{1} = \frac{40}{3} = 13\frac{1}{3}$$

Martin uses  $13\frac{1}{3}$  cups of flour.

Multiply.



$$4\frac{1}{6} \times 3\frac{3}{5} = \frac{25}{6} \times \frac{18}{5}$$
$$= \frac{25^{5}}{6} \times \frac{18^{5}}{5}$$
$$= \frac{15}{1} = 15$$

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