Chapter 1 Ratios and Proportional Reasoning

Lesson 1-2 Complex Fractions and Unit Rates
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3 **Simplify.**

$\frac{\frac{8}{9}}{6} = \frac{8}{9} \div 6$ Write the complex fraction as a division problem.

$= \frac{8}{9} \times \frac{1}{6}$ Multiply by the reciprocal of 6.

$= \frac{8}{54}$ or $\frac{4}{27}$ Simplify.

7 **Mary is making pillows for her Life Skills class. She bought $2\frac{1}{2}$ yards of fabric. Her total cost was $15. What was the cost per yard?**

$\frac{15}{2\frac{1}{2}} = 15 \div 2\frac{1}{2}$ Write the complex fraction as a division problem.

$= 15 \div \frac{5}{2}$ Write the mixed number as an improper fraction.

$= 15 \times \frac{2}{5}$ Multiply by the reciprocal of $\frac{5}{2}$.

$= \frac{30}{5}$ or 6 Simplify.

Mary spent $6 per yard of fabric.