Chapter 4 Rational Numbers

Lesson 4-2 Compare and Order Rational Numbers
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5 **On her first quiz in social studies, Meg answered 92% of the questions correctly. On her second quiz, she answered 27 out of 30 questions correctly. On which quiz did Meg have the better score?**

The fraction $\frac{27}{30}$ represents 27 out of 30 questions. Write 92% and $\frac{27}{30}$ as decimals and compare.

92% = 0.92
27 ÷ 30 = 0.90

Since 0.92 > 0.90, 92% > $\frac{27}{30}$.

So, Meg had the better score on her first quiz.

9 **Is $1\frac{7}{12}$ gallons <, >, or = to $1\frac{5}{8}$ gallons?**

Find equivalent improper fractions. The LCD of 12 and 8 is 24.

$1\frac{7}{12} = \frac{19}{12}$ Write $1\frac{7}{12}$ as an improper fraction.

$= \frac{19 \times 2}{12 \times 2}$ Rename using the LCD, 24.

$= \frac{38}{24}$ Simplify.

$1\frac{5}{8} = \frac{13}{8}$ Write $1\frac{5}{8}$ as an improper fraction.

$= \frac{13 \times 3}{8 \times 3}$ Rename using the LCD, 24.

$= \frac{39}{24}$ Simplify.

Since $\frac{38}{24} < \frac{39}{24}$, $1\frac{7}{12}$ gallons < $1\frac{5}{8}$ gallons.