Fraction Practice Test

Simplify.

1. \( \frac{5}{40} \)  
2. \( \frac{21}{42} \)

Compare using <, >, or =.

3. \( \frac{5}{10} \quad \frac{6}{7} \)  
4. \( \frac{5}{9} \quad \frac{7}{14} \)

Order fractions from least to greatest.

5. \( \frac{6}{14}, \frac{1}{2}, \frac{4}{9} \)  
6. \( \frac{2}{10}, \frac{5}{7}, \frac{6}{8} \)

Add or subtract. Write the answer in simplest form.

7. \( \frac{6}{18} + \frac{3}{12} \)  
8. \( \frac{2}{7} + 3\frac{3}{4} \)

9. \( 2 - \frac{5}{13} \)  
10. \( 2\frac{2}{5} - 1\frac{3}{4} \)

Multiply or divide. Write the answer in simplest form.

10. \( \frac{4}{15} \cdot \frac{9}{13} \)  
11. \( \frac{2\frac{2}{3}}{3} \cdot \frac{3}{5} \)

12. \( \frac{2}{3} + \frac{1}{5} \)  
13. \( \frac{3\frac{1}{2}}{2} + 2\frac{2}{3} \)

CST Practice

14. Dacia made a snack mix using the ingredients listed below:

\( \frac{1\frac{1}{2}}{2} \) cups granola  \( \frac{3}{4} \) cup raisins  \( \frac{1}{2} \) cup peanuts  \( \frac{1}{4} \) cup chocolate chips

What is the total amount of the four ingredients?  \( \quad \) cups
15. Which of the following is the next step using the least common denominator to simplify \( \frac{7}{8} - \frac{5}{6} \)?

(A) \( \frac{7 \cdot 3}{8 \cdot 3} - \frac{5 \cdot 4}{6 \cdot 4} \)

(B) \( \frac{7 \cdot 4}{8 \cdot 4} - \frac{5 \cdot 3}{6 \cdot 3} \)

(C) \( \frac{7 \cdot 5}{8 \cdot 5} - \frac{5 \cdot 7}{6 \cdot 7} \)

(D) \( \frac{7 \cdot 7}{8 \cdot 7} - \frac{5 \cdot 5}{6 \cdot 5} \)

Vocabulary

prime number: a whole number greater than 1 whose only whole number factors are 1 and itself.

composite number: a whole number greater than 1 that has factors other than 1 and itself.

prime factorization: writing a number as the product of prime numbers.

common factor: a whole number that is a factor of two or more nonzero whole numbers.

greatest common factor (GCF): the largest common factor of two or more nonzero whole numbers. It is also called the greatest common divisor.

multiple of a number: a multiple of a number is the product of the number and any nonzero whole number.

common multiple: a multiple shared by two or more numbers. For example, 10 and 20 are common multiples of 2 and 5.

least common multiple (LCM): the smallest common multiple of two of more numbers.

simplest form of a fraction: a fraction is in simplest form if the only common factor of the numerator and denominator is 1.

equivalent fractions: fractions that have the same simplest form.

Rules for Fractions with a Common Denominator: To add two fractions with a common denominator, add their numerators and write their sum over the denominator. To subtract two fractions with a common denominator, subtract their numerators and write the difference over the denominator.

Rules for Fractions with Different Denominators: One way to add or subtract fractions with different denominators is to rewrite the fractions using a common denominator, then add or subtract the numerator.

least common denominator (LCD): the least common multiple of the denominators of two or more fractions.

multiplying fractions: To multiply two fractions, multiply the numerators to get the numerator of the product and multiply the denominators to get the denominator of the product.

multiplicative inverses: Two numbers whose product is 1. Multiplicative inverses are also called reciprocals.

reciprocals: Two numbers whose product is 1. Reciprocals are also called multiplicative inverses.

Inverse Property of Multiplication: The product of a nonzero rational number and its multiplicative inverse is 1.