

Write each number as a product of primes.

1. 50

2. 36

3. 45

4. 90

Write the fractions in lowest terms.

5. $\frac{4}{12}$

6. $\frac{10}{24}$

7. $\frac{42}{45}$

Perform the indicated operations. Simplify answers.

8. $\frac{10}{21} + \frac{5}{21}$

9. $\frac{10}{3} - \frac{5}{21}$

10. $\frac{2}{5} \cdot \frac{5}{7}$

$$11. \frac{3}{4} \div \frac{7}{12}$$

$$12. 7 + \frac{2}{5}$$

$$13. \frac{5}{8} \div 3\frac{1}{4}$$

$$14. \frac{5}{18} \div \frac{10}{36}$$

$$15. \frac{2}{3} - \frac{5}{9} + \frac{5}{6}$$

$$16. \frac{3}{8} + \frac{7}{10}$$

Solutions to Fraction Self Check

1. $50 = 2 \cdot 5 \cdot 5$

2. $36 = 2 \cdot 2 \cdot 3 \cdot 3$

3. $45 = 3 \cdot 3 \cdot 5$

4. $90 = 2 \cdot 3 \cdot 3 \cdot 5$

Write the fractions in lowest terms.

5. $\frac{4}{12} = \frac{1}{3}$

6. $\frac{10}{24} = \frac{2 \cdot 5}{2 \cdot 2 \cdot 2 \cdot 3} = \frac{5}{12}$

7. $\frac{42}{45} = \frac{2 \cdot 3 \cdot 7}{3 \cdot 3 \cdot 5} = \frac{14}{15}$

8. $\frac{10}{21} + \frac{5}{21} = \frac{15}{21} = \frac{5}{7}$

9. $\frac{10}{3} - \frac{5}{21} = \frac{7 \cdot 10}{7 \cdot 3} - \frac{5}{21} = \frac{70}{21} - \frac{5}{21} = \frac{65}{21}$

10. $\frac{2}{5} \cdot \frac{5}{7} = \frac{2}{\cancel{5}^1} \cdot \frac{\cancel{5}^1}{7} = \frac{2}{7}$

11. $\frac{3}{4} \div \frac{7}{12} = \frac{3}{\cancel{4}^1} \cdot \frac{\cancel{12}^2}{7} = \frac{9}{7}$

12. $7 + \frac{2}{5} = 7\frac{2}{5}$ or $\frac{37}{5}$

13. $\frac{5}{8} \div 3\frac{1}{4} = \frac{5}{8} \div \frac{13}{4} = \frac{5}{\cancel{8}^2} \cdot \frac{\cancel{4}^1}{13} = \frac{5}{26}$

14. $\frac{5}{18} \div \frac{10}{36} = \frac{\cancel{5}^1}{\cancel{18}^1} \cdot \frac{\cancel{36}^2}{\cancel{10}^2} = \frac{2}{2} = 1$

15. $\frac{2}{3} - \frac{5}{9} + \frac{5}{6} = \frac{6 \cdot 2}{6 \cdot 3} - \frac{2 \cdot 5}{2 \cdot 9} + \frac{3 \cdot 5}{3 \cdot 6} = \frac{12}{18} - \frac{10}{18} + \frac{15}{18} = \frac{17}{18}$

$$16. \frac{3}{8} + \frac{7}{10} = \frac{5 \cdot 3}{5 \cdot 8} + \frac{4 \cdot 7}{4 \cdot 10} = \frac{15}{40} + \frac{28}{40} = \frac{43}{40}$$

If you do well and understand, go to mymathlab homework.
If not, choose the appropriate videos to review.