

MathFLIX CHALLENGE

Simplification of Prime and Relatively Prime Fractions

Part I

If the numerator and the denominator are both prime numbers, the fraction is in its simplest form. *Review the fractions below and circle the simplified fraction in each pair.*

$\frac{2}{3} \quad \frac{2}{6}$

$\frac{5}{7} \quad \frac{9}{11}$

$\frac{2}{5} \quad \frac{5}{20}$

$\frac{11}{22} \quad \frac{11}{13}$

$\frac{7}{11} \quad \frac{7}{14}$

$\frac{7}{21} \quad \frac{7}{13}$

$\frac{11}{22} \quad \frac{11}{17}$

$\frac{13}{19} \quad \frac{13}{26}$

Part II

A fraction with a prime number and a composite number may be relatively prime if the numbers have no common factors. If a fraction is relatively prime, it is simplified.

Review the fractions below and circle the simplified fraction in each pair.

$\frac{3}{4} \quad \frac{3}{6}$

$\frac{2}{10} \quad \frac{2}{9}$

$\frac{2}{4} \quad \frac{4}{5}$

$\frac{5}{25} \quad \frac{5}{12}$

$\frac{7}{10} \quad \frac{7}{21}$

$\frac{7}{14} \quad \frac{14}{23}$

$\frac{18}{19} \quad \frac{18}{20}$

$\frac{13}{20} \quad \frac{13}{26}$

$\frac{5}{10} \quad \frac{5}{8}$

$\frac{2}{9} \quad \frac{2}{8}$

$\frac{3}{6} \quad \frac{6}{11}$

$\frac{3}{10} \quad \frac{5}{10}$

Part III

A fraction with two composite numbers may be relatively prime if the numerator and the denominator have no common factors. If a fraction is relatively prime, it is simplified.

Review the fractions below and circle the simplified fraction in each pair.

$\frac{14}{15} \quad \frac{9}{15}$

$\frac{6}{9} \quad \frac{4}{9}$

$\frac{8}{9} \quad \frac{9}{12}$

$\frac{4}{15} \quad \frac{4}{8}$

$\frac{10}{21} \quad \frac{9}{21}$

$\frac{8}{15} \quad \frac{8}{16}$

$\frac{20}{21} \quad \frac{15}{21}$

$\frac{14}{16} \quad \frac{16}{21}$

$\frac{5}{25} \quad \frac{4}{25}$

$\frac{12}{15} \quad \frac{14}{15}$

$\frac{8}{12} \quad \frac{8}{21}$

$\frac{9}{16} \quad \frac{8}{16}$