Year 6 Maths Homework

Due in Friday 16th November 2018

Simplifying Fractions

Find common factors for these fractions and reduce them to their simplest terms.

e.g. $\frac{4}{12} = \frac{1}{3}$

1. $\frac{3}{15}$
2. $\frac{5}{30}$
3. $\frac{7}{63}$
4. $\frac{12}{44}$
5. $\frac{14}{84}$

Equivalent Fractions

Are these fraction pairs equivalent or not? Prove it by applying the same calculation to the numerator and denominator and checking if you get the right answer.

e.g. $\frac{2}{5} = \frac{10}{20}$ - Not equivalent, because 2x5=10 but 5x5=25, not 20.

1. $\frac{3}{4} = \frac{12}{16}$
2. $\frac{5}{20} = \frac{15}{80}$
3. $\frac{4}{9} = \frac{20}{54}$
4. $\frac{12}{55} = \frac{36}{165}$
5. $\frac{18}{45} = \frac{144}{405}$

Improper Fractions to Mixed Numbers

Convert these improper fractions to mixed numbers. Remember to divide the numerator by the denominator. The answer is your whole number, the remainder is your numerator, and the denominator stays the same.

e.g. $\frac{9}{4}$ = 9 ÷ 4 = 2 r 1 = $2\ \frac{1}{4}$

1. $\frac{13}{5}$
2. $\frac{16}{6}$
3. $\frac{23}{7}$
4. $\frac{52}{8}$
5. $\frac{102}{9}$

Mixed Numbers to Improper Fractions

Time to go the other way! Convert these mixed numbers into improper fractions by multiplying the denominator by the whole number and adding the numerator. Your answer is the new numerator, and the denominator stays the same.

e.g. $2\ \frac{1}{4}$ = 4 x 2 + 1 = 9 = $\frac{9}{4}$

1. $1\ \frac{3}{4}$
2. $2\ \frac{4}{5}$
3. $4\ \frac{5}{8}$
4. $7\ \frac{7}{9}$
5. $13\ \frac{11}{14}$