Simplifying Fractions

Definition - Simplifying fractions means writing them using the smallest possible numbers.

Strategies (How do I do it?)

Strategy 1 - See if numerator and denominator both end in 0.

If they do - divide by 10.

Strategy 2 - See if num. and denom. both end in an even number.

If they do - divide by 2.

Strategy 3 - See if num. and denom. end in 5 or 0.

If they do - divide by 5.

Strategy 4 - Add up the digits in the number. If the answer is divisible by 3, then divide by 3.

51 5+1=6

540 5+4+0=9

504

180

3|540

-3

24

24

Examples

$\frac{3}{12} \div \frac{3}{3} = \frac{1}{4}$

$\frac{10}{15} \div \frac{5}{5} = \frac{2}{3}$

$\frac{6}{14} \div \frac{2}{2} = \frac{3}{7}$

$\frac{14}{21} \div \frac{7}{7} = \frac{2}{3}$