

## Sec. 11.1 Simplifying Rational Expressions

rational expression:  $\frac{\text{polynomial}}{\text{polynomial}}$

excluded value: a value for which a rational expression is undefined - when the denominator is zero

ex:  $\frac{x+2}{x-3}$   $x-3=0$ , so  $x \neq 3$   
 $x=3$   
excluded

Problem 1: What is the simplified form of the expression? State any excluded values.

a.  $\frac{x+3}{2x+6}$

b.  $\frac{5x+10}{x^2-x-6}$

c.  $\frac{x^2-9}{-x^2+2x+3}$