AA5-1 Name _____

Simplifying Rational Expressions

Check for understanding:

Which three of the rational expression **cannot** be simplified.

$\frac{2x^2+8x}{x+4}$ $\frac{x+1}{x+2}$ $\frac{2x-4}{2x-4}$ $\frac{15}{7}$ $\frac{2x-4}{2x-5}$ $\frac{x^2+7x+10}{x^2-25}$

Practice: C-Level

1. $\frac{2x^2+8x}{x+4}$	2. $\frac{4x^2-12x}{x-3}$	3. $\frac{2x^2+10x}{x+5}$
4. $\frac{5x^3+10x^2}{20x^2}$	5. $\frac{x^2+x}{x^2-1}$	6. $\frac{2x^4+8x^3}{3x+12}$
7. $\frac{x^2+7x+6}{x^2-1}$	8. $\frac{x^2+4x+3}{x^2-9}$	9. $\frac{x^2+5x+4}{x^2-16}$

10. $\frac{x^2+8x+15}{x^2+x-6}$	11. $\frac{x^2+3x+2}{x^2+6x+5}$	12. $\frac{x^2+4x+3}{x^2+5x+6}$

Practice B-Level

13. $\frac{2x^2-x-3}{2x^2-13x+15}$	14. $\frac{x^2-4}{5x^2+13x+6}$	15. $\frac{x^4-16}{x^2-3x-28}$

Looking back:	Looking ahead: Multiply and simplify
$\frac{3}{7}\cdot\frac{2}{5}=$ $\frac{3}{11}+\frac{4}{11}=$ $\frac{1}{5}+\frac{3}{4}=$ $\frac{3}{4}-\frac{1}{6}=$	$\frac{3x+12}{x^2}\cdot\frac{x}{x+4}$