

1/14/12

## Factoring out the greatest common factor

Things to Remember

• look for what is in common for variables and coefficients.

• Whatever you divide by, you put on the outside of your parentheses.

Factor

Ex

①  $\frac{2a^2}{2a} + \frac{6a}{2a}$

$2a(a+3)$

~~$\frac{a \cdot a}{a}$~~

②  $\frac{3y^4}{3} + \frac{6y^2}{3} + \frac{6}{3}$

$3(y^4 + 2y^2 + 2)$

③  $\frac{32x^5}{x^4} - \frac{17x^4}{x^4}$

$x^4(32x - 17)$

~~$\frac{x^5}{x^4}$~~

④  $\frac{2x^2}{2} + \frac{2x}{2} - \frac{8}{2}$

$2(x^2 + x - 4)$

⑤  $\frac{14m^4}{2m} - \frac{12m}{2m}$

$2m(7m^3 - 6)$

~~$\frac{m^4}{m}$~~