

Do Now: First identify the type of factoring and then factor it!

<p>A. $\frac{4x^2}{4x} - \frac{12x}{4x}$ G.C.F. $4x(x-3)$</p>	<p>B. $\sqrt{4x^2} \sqrt{9}$ DOTS $(2x+3)(2x-3)$</p>	<p>C. $x^2+5x-14$ EasyTri $(x+7)(x-2)$</p>
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AIM: How do we Factoring Completely?

When you factor completely it involves factoring more than once

<p>1. $\frac{5x^2}{5} - \frac{125}{5}$ G.C.F. $5(x^2 - 25)$ DOTS $5(x+5)(x-5)$</p>	<p>2. $\frac{2x^2}{2} + \frac{8x}{2} - \frac{10}{2}$ $2(x^2 + 4x - 5)$ G.C.F. $2(x+5)(x-1)$ EasyTri</p>
<p>3. $\sqrt{x^4} \sqrt{1}$ $(x^2 - 1)(x^2 + 1)$ DOTS $(x-1)(x+1)(x^2+1)$ DOTS</p>	<p>4. $\frac{2x^2}{2} - \frac{50}{2}$ $2(x^2 - 25)$ G.C.F. $2(x+5)(x-5)$ DOTS</p>
<p>5. $\frac{4x^2}{4} + \frac{16x}{4} + \frac{12}{4}$ $4(x^2 + 4x + 3)$ G.C.F. $4(x+3)(x+1)$ EasyTri</p>	<p>6. $\frac{xy^2}{x} - \frac{x^3}{x}$ $x(y^2 - x^2)$ G.C.F. $x(y-x)(y+x)$ DOTS</p>

Partner Practice

7. $\frac{4x^2}{4} - \frac{8x}{4} + \frac{4}{4}$ G.C.F
 $4(x^2 - 2x + 1)$ Easy tri

$4(x-1)(x-1)$

8. $\sqrt{x^4} - \sqrt{y^4}$ DOTS
 $(\sqrt{x^2} - \sqrt{y^2})(x^2 + y^2)$
 $(x-y)(x+y)(x^2 + y^2)$ DOTS.

9. $\frac{y^6}{y^2} - \frac{y^2}{y^2}$ G.C.F
 $y^2(\sqrt{y^4} \sqrt{1})$ DOTS

$y^2(y^2 + 1)(\sqrt{y^2} \sqrt{1})$ DOTS

$y^2(y^2 + 1)(y + 1)(y - 1)$

10. $\frac{81x^4}{x^4} - \frac{x^8}{x^4}$ G.C.F
 $x^4(\sqrt{81} \sqrt{x^4})$ DOTS.
 $x^4(9 - x^2)(9 + x^2)$ DOTS

$x^4(3-x)(3+x)(9+x^2)$

11. $x^4 - 4x^2 + 3$ Easy tri
 $(x^2 - 3)(x^2 - 1)$ DOTS

$(x^2 - 3)(x + 1)(x - 1)$

12. $\frac{3x^3}{3x} - \frac{6x^2}{3x} - \frac{9x}{3x}$ G.C.F
 $3x(x^2 - 2x - 3)$ Easy tri

$3x(x-3)(x+1)$