

$a^2x^2 + bx + c$  Some signs, both  
 needs to be positive  
 $a^2x^2 - bx - c$  Opposite signs, larger number is negative  
 $-x^2 + 12x - 11$   
 $-(x^2 - 12x + 11)$   
 Same signs, both neg.

Apr 15-10:08 AM

Exam #3 - next Friday  
 April 22, 2016  
 All Chp 6 - Factoring

Apr 15-10:14 AM

Difference of Two Squares  
 $a^2 - b^2 = (a+b)(a-b)$   
 Factored Form  
 $49y^2 - 4$   
 $a^2 = 49y^2$   
 $b^2 = 4$   
 $a = 7y$   
 $b = 2$   
 $(7y+2)(7y-2)$

Apr 15-10:21 AM

$x^2 - 1$   
 $a = x$   
 $b = 1$   
 $(x+1)(x-1)$   
 $81 - 169g^2$   
 $a = 9$   
 $b = 13g$   
 $(9+13g)(9-13g)$   
 $a^2b^2 - 16x^2$   
 $a = 4x$   
 $b = 4x$   
 $(4x+4x)(4x-4x)$   
 $25x^4 - 1$   
 $a = 5x^2$   
 $b = 1$   
 $(5x^2+1)(5x^2-1)$

Apr 15-10:27 AM

$x^8 - 4$   
 $a = x^4$   
 $b = 2$   
 $(x^4+2)(x^4-2)$   
 $(x^2+\sqrt{2})(x^2-\sqrt{2})$

Apr 15-10:33 AM

Difference/Sum of Two Cubes  
 ① Difference  
 $(a-b)(a^2+ab+b^2)$   
 $= a^3 + a^2b + ab^2 - a^2b - ab^2 - b^3$   
 $= a^3 - b^3$   
 $27x^3 - 8$   
 $a = 3x$   
 $b = 2$   
 $(3x-2)(9x^2+6x+4)$   
 $y^3 - 125$   
 $a = y$   
 $b = 5$   
 $(y-5)(y^2+5y+25)$

Apr 15-10:36 AM

$$\frac{343t^3\Delta^3}{a^3} - \frac{64\gamma^3}{b^3}$$
$$\left. \begin{array}{l} a = 7t\Delta \\ b = 4\gamma \end{array} \right\} (7t\Delta - 4\gamma)(49t^2\Delta^2 + 28t\Delta\gamma + 16\gamma^2)$$

Apr 15-10:47 AM