**#4 FACTORING QUADRATICS – SPECIAL CASES**

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| **SPECIAL CASES CATEGORY #1: GCF** |
| Why pull out a GCF first?  If there is a GCF, it will make the resulting polynomial much easier to factor, if you pull it out first!  \*First pull out the GCF. Then factor like normal! |

EXAMPLE PROBLEMS:  
1. Factor: 2x2 -26x + 72 2. Factor: 3x3 - 30x2 + 72x

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| **SPECIAL CASES CATEGORY #2: DIFFERENCE OF SQUARES** | |
| What makes it a perfect square?  1. Both terms are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_.  2. There is no \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ term.  3. There is a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ sign. | FORMULA: |

EXAMPLE PROBLEMS:  
1. Factor: x2 – 16 2. Factor: y2 – 64 3.Factor: 4n2- 81

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