**Math 3 Unit 1 - Factoring**

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| x2 – 8x – 48 | 25x4 – 4y4(hint: this is a difference of squares) | 3x3 + 9x2 + 2x + 6  |
| 2x2 – 162 (hint: factor out a GCF) | 2y2 – 9y – 5 | 18x2 – 9x(hint: factor out a GCF ) |
| 2x2 - 8x – 10 | 2x3 + 8x2 + x + 4 | 4x2 – 81  (hint: this is a difference of squares) |
| 3x2 + 8x + 4 | x4 – 1 (hint: this is a difference of squares) | 9x3 + 12x2 – 3x – 4 |

Challenge: 

**Show that (x + 3) is a factor of (x3 + 7x2 + 16x + 12) and determine the other two factors.**