**Secondary Math 2 6.5 Homework Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_\_**

**Factoring Special Cases**

**Factor each difference of squares problem:**

|  |  |  |  |
| --- | --- | --- | --- |
|  | $$4x^{2}-9$$ |  | $$3x^{2}-27y^{2}$$ |

**Review Problems:**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Factor Completely:$$2x^{2}+2x-12$$ |  | Factor Completely:$$4x^{2}-42x+20$$ |
|  | Factor Completely:$$8x^{2}+10x-3$$ |  | Distribute:$$\left(7x+2\right)\left(x+3\right)$$ |

**Factor each perfect square trinomial:**

|  |  |  |  |
| --- | --- | --- | --- |
|  | $$2x^{2}-16x+32$$ |  | $$25x^{2}+30x+9$$ |

**Extra Credit:**

What value of $"k"$ would make the expression $25x^{2}-kx+1$ a perfect square trinomial?