**Secondary Math 2 6.2 Homework Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_\_**

**Factoring by Grouping**

**Factor out a common factor out of each expression**

|  |  |  |  |
| --- | --- | --- | --- |
|  | $$27x^{3}-9x$$ |  | $$-16x+24x^{6}-24xy$$ |

**Review Problems:**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Simplify:$$4x\left(4x+7\right)$$ |  | Simplify:$$\left(2x-x^{2}+1\right)-\left(4x^{2}+1\right)$$ |
|  | Solve for x: |  | Solve for x. Assume that lines which appear tangent are tangent. |

**Factor by grouping**

|  |  |  |  |
| --- | --- | --- | --- |
|  | $$3x^{3}+6x^{2}+x+2$$ |  | $$20x^{3}+25x^{2}-16x-20$$ |