Math 2 Unit 2A - Unit Review Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**For 1-3, graph the given transformed quadratic function using a table of characteristic points.**

1. $y=\frac{1}{2}(x+4)^{2}$

|  |  |
| --- | --- |
| x | y |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |



2. $y=-(x-3)^{2}-2$

|  |  |
| --- | --- |
| x | y |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |



3. $y=-2(x+7)^{2}$

|  |  |
| --- | --- |
| x | y |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

**For 4-5, convert each quadratic equation in vertex form to factored form. Be sure to swing by standard form on your way!**

4. $y=2(x-3)^{2}-8$

 Standard Form:

 Factored Form:

5. $y=-(x+2)^{2}+1$

 Standard Form:

 Factored Form:

**For 6-9, factor the quadratic expression.**

6. $x^{2}-8x-33$ 7. $15x^{2}+2x-8$

8. $14x^{2}-49x+21$ 9. $2x^{2}+26x$