**Factoring and Solving Quadratic Equations**

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Writing quadratic functions in factored form helps us find the x-intercepts of the graph of the function.

Examples

Factor and find the x-intercepts of each quadratic function. Check your work by looking at a graph of each quadratic function.

1. $y=x^{2}+6x+8$
2. $y=x^{2}+10x+24$
3. $y=x^{2}-7x+10$
4. $y=x^{2}+x-12$
5. $y=2x^{2}+8x+8$

Independent Practice

Factor and find the x-intercepts of each quadratic function. Check your work by looking at a graph of each quadratic function.

1. $y=x^{2}+8x+7$
2. $y=x^{2}+13x+30$
3. $y=x^{2}-7x+12$
4. $y=x^{2}-2x-15$
5. $y=3x^{2}+6x-9$