$a = 1$

Name: _____ Date: _____

Learning Goal 3.3	Convert standard form of the quadratic equation to vertex form by completing the square.

Standard Form → Vertex Form

Complete the square on this quadratic function.

$$f(x) = x^2 + 8x + 5$$

1. Start the same way we did in the exploration activity.
2. Add in the rest of the equation.
3. Isolate the perfect square trinomial
4. Simplify.

$a = 1$

Example Convert the following functions into vertex form of the equation.

a. $f(x) = x^2 + 6x + 5$

1.

2.

3.

4.

b. $g(x) = x^2 + 8x - 7$

1.

2.

3.

4.

c. $h(x) = x^2 + 7x - 45$

1.

2.

3.

4.

d. $y = x^2 + 19x + 66$

1.

2.

3.

4.