Interesting connection between factored form and what the graph will look like:

- Two distinct factors
- Two identical factors
- Unfactorable

Ex 1. What’s the vertex of \( y = -(x - 5)(x - 9) \)

Ex 2. What’s the vertex \( y = 5(x + 2) \)

How would you find the y-intercept of a quadratic function in factored form?

\[ y = (x - 4)(x + 3) \]
7.4 Factored Form – Part 2

Ex 3. What is the y-intercept of \( y = (x + 6)(x + 1) \)

Ex 4. What is the y-intercept of \( y = 2(x + 5)(x - 4) \)