

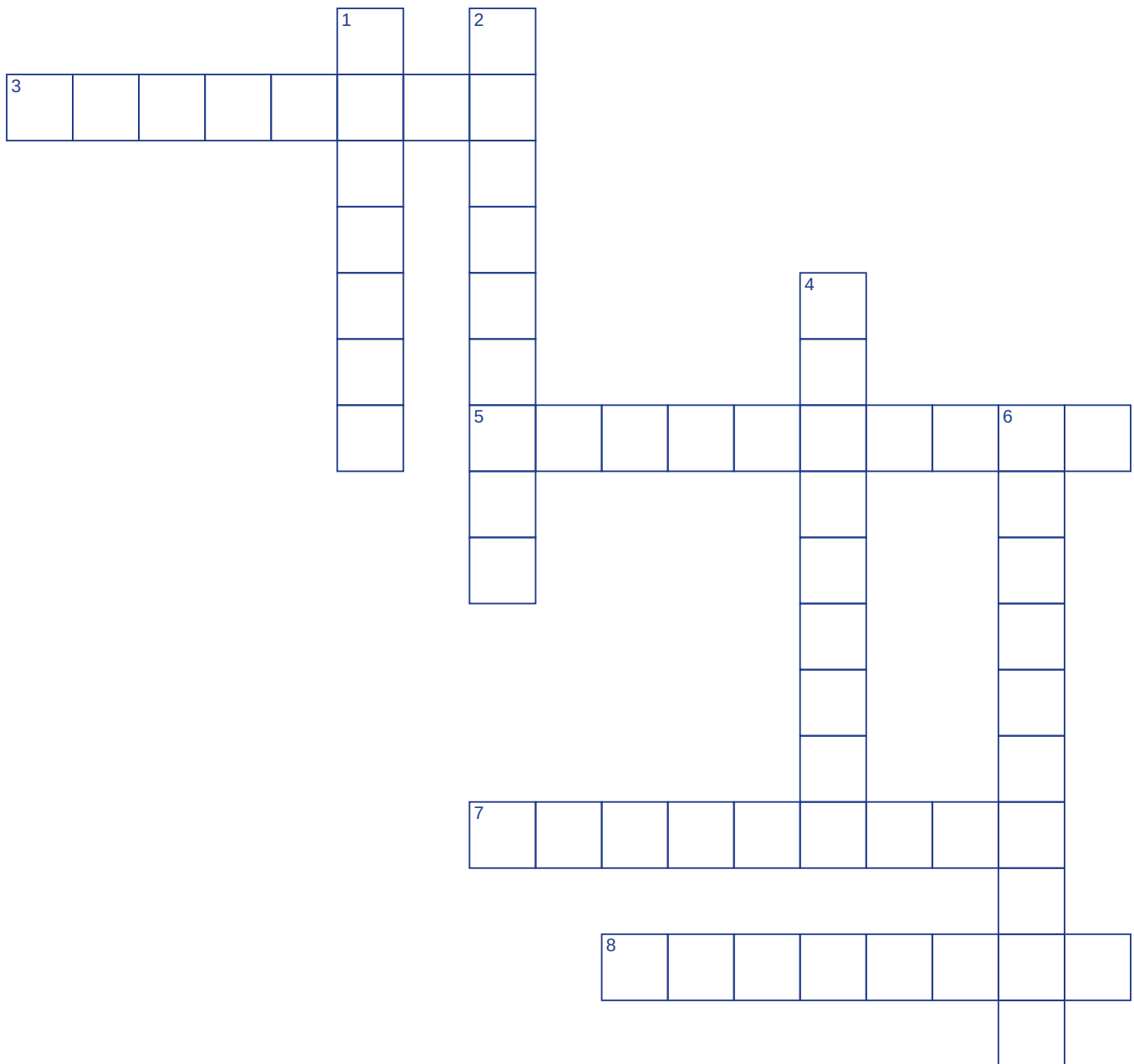
Quadratic Functions Crossword

This puzzle reviews the vocabulary students need when analyzing quadratic functions in the forms $y = a(x - p)^2 + q$ and $y = ax^2 + bx + c$, including the vertex, axis of symmetry, direction of opening, and x- and y-intercepts ([Outcome](#), [Outcome](#), [Outcome](#)). It also covers analyzing quadratic functions of the form $y = a(x - p)^2 + q$ to determine the vertex, domain and range, direction of opening, axis of symmetry, and x- and y-intercepts ([Resource](#), [Resource](#)).

How to play

Read each clue and write the matching term in the grid, one letter per box. Numbers on the grid mark where each answer begins. Across answers read left to right; down answers read top to bottom. Some letters are shared between an across word and a down word where they cross, so use those overlaps to check your work. Solve the shorter or more familiar words first, then use their letters to help complete the longer ones.

Puzzle grid



Clues

Across

3. The U-shaped curve formed by a quadratic function ([Resource](#)). (8)
4. A statement comparing two expressions using $>$, $<$, "e, or [Outcome](#). (10)
5. A point where a graph crosses an axis ([Outcome](#)). (9)
6. The property that a parabola is identical on both sides of a vertical line ([Outcome](#)). (8)

Down

1. A method to find solutions to $ax^2 + bx + c = 0$ ([Resource](#)). (7)
2. Breaking down a polynomial into simpler expressions that multiply together ([Outcome](#)). (9)

3. A polynomial equation or function with degree 2 ([Outcome](#)). (9)
4. The parabolic path of an object moving through space ([Resource](#)). (10)

Answer key

- **1 down:** FORMULA
- **2 down:** FACTORING
- **3 across:** PARABOLA
- **4 down:** QUADRATIC
- **5 across:** INEQUALITY
- **6 down:** TRAJECTORY
- **7 across:** INTERCEPT
- **8 across:** SYMMETRY

