

Sort it Out (functions)

Here is a set of 20 words, symbols and ideas related to functions. Your task is to sort these representations into whatever categories make sense to you.

- You may have as many categories as you like.
- Your categories might be completely separate, or they might overlap. Some categories might be specialized subsets within a category.

1 steady rate	2 Vertex (3,-2) Roots at $X = 4.5, x = 1.5$	3	4 $Y = ax^2 + bx + c$
5 $Y = 2X + 7$	6 $\frac{\textit{rise}}{\textit{run}}$	7 X-intercept	8 Using the discriminant to find the number of real solutions
9 $Y = (2x + 7)(x - 4)$	10	11 steadily increasing	12 Y-intercept
13 Axis of symmetry $\frac{-b}{2a}$	14 exponential decay	15 $Y = 3^x$	16 $X = 15$
17 horizontal asymptote (approaching the x-axis)	18 doubling	19	20 direct variation