

- ## Understand

- Find a possible formula for a polynomial which goes to $-\infty$ as $x \rightarrow -\infty$, goes to ∞ as $x \rightarrow \infty$, turns twice, has zeros at $x = -1$, $x = 3$ and $x = 4$, and has y -intercept $(0, 5)$. (Hint: sketch the graph first.)
- Without graphing it, identify all horizontal and vertical asymptotes of $y = \frac{x^2 - 5x + 6}{16 - x^2}$.