

1. (§5.1) Graph polynomial functions.

EG Sketch the graph of $f(x) = (x - 2)^2 (x - 3) (x + 1)$

2. (§5.2, §5.3) Graph rational functions.

EG Sketch the graph of $R(x) = \frac{x^2 - x - 12}{x + 1}$

3. (§5.4) Solve rational inequality.

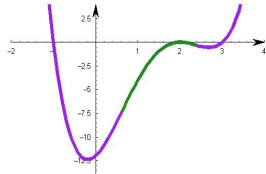
EG Solve $\frac{x}{x + 2} < \frac{1}{x}$

4. (§5.5, §5.6) Find zeros of polynomials.

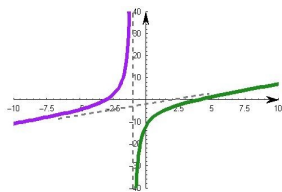
EG Find all the roots/zeros of $P(x) = 2x^3 - 5x^2 + 6x - 2$

Short answers:

1.



2.



3. $(-2, -1] \cup (0, 2]$

4. $\frac{1}{2}, 1 + i, 1 - i$

Detailed answers start next page.