

1 – 4: Find the domain and zeros.

1. $f(x) = \frac{x-3}{x^2-3x+2}$

2. $f(x) = \sqrt{x^2-3x+2}$

3 – 5: Sketch the graph. Tell if it's a function. Then find the domain, range and zeros

3. $f(x) = \sqrt{x-4}$

4. $f(x) = 2|x-4|+1$

5. $f(x) = -4(x-5)(x+1)(x+3)$

Answers:

1. Domain: $x \neq 1; x \neq 2$

- Zeros: 3

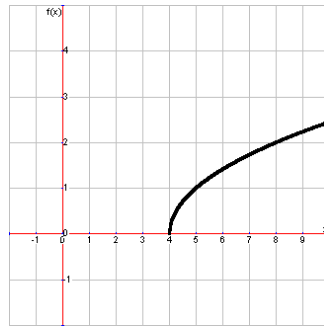
2. Domain: $x \geq 2$ or $x \leq 1$

- Zeros: 1 and 2

3. Domain: $x \geq 4$

- Range: $y \geq 0$

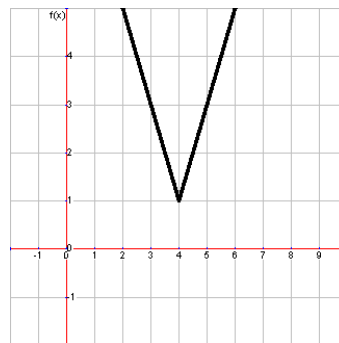
- Zeros: 4



4. Domain: all real numbers

- Range: $y \geq 1$

- Zeros: none



5. Domain: all real numbers

- Range: all real numbers

- Zeros: -3, -1 and 5

