

Written Homework Section 2.4

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Name: _____

Due: _____

Given the function:

(a) Find the domain of the function.
 (d) Based on the graph, find the range.

38. $f(x) = \begin{cases} 2-x & \text{if } -3 \leq x < 1 \\ \sqrt{x} & \text{if } x > 1 \end{cases}$

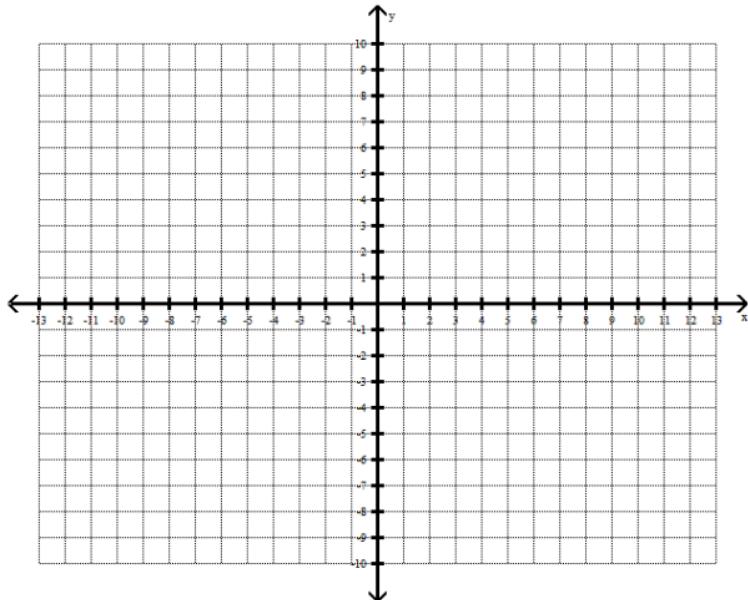
Domain: _____

Intercepts: _____

Range: _____

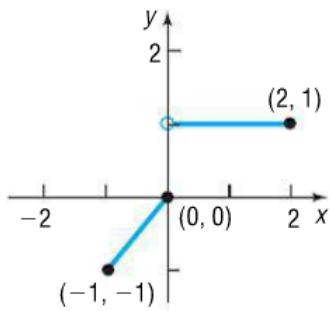
Continuous? YES or NO

(b) Locate any intercepts. (c) Graph the function.
 (e) Is f continuous on the domain?



The graph of a piecewise-defined function is given. Write a definition for each function.

42.



Answer: $f(x) = \begin{cases} \text{blue ray} & x < -1 \\ \text{red line segment} & -1 \leq x < 2 \\ \text{blue line segment} & x = 2 \end{cases}$