

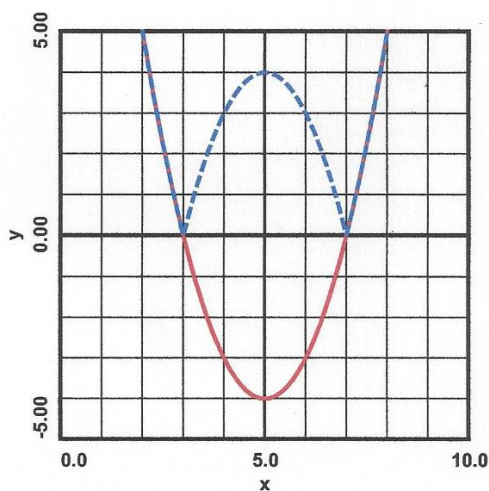
PRE-AP ALGEBRA 2

For problems 1 and 2, given the function $y = f(x)$:

- Fill in the table.
- Graph both $y = f(x)$ and $y = |f(x)|$ on the grid provided.
- State the domain and range of both $y = f(x)$ and $y = |f(x)|$.

1) $y = f(x) = x^2 - 10x + 21$

x	$f(x)$	$ f(x) $
2	5	5
3	0	0
4	-3	3
5	-4	4
6	-3	3
7	0	0
8	5	5



$y = x^2 - 10x + 21$

domain: $-\infty < x < \infty$

range: $-4 \leq y < \infty$

$y = |x^2 - 10x + 21|$

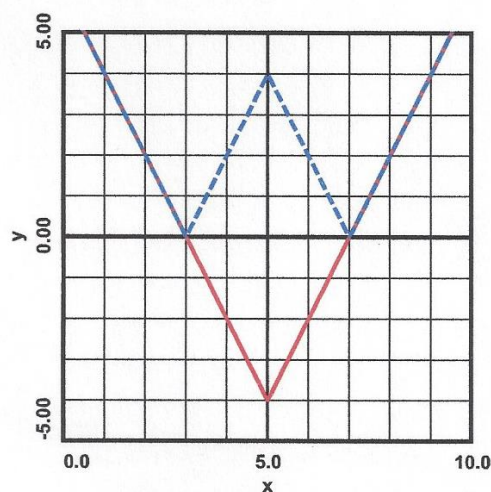
domain: $-\infty < x < \infty$

range: $0 \leq y < \infty$

2A.2 CLASSWORK

2) $y = f(x) = 2|x - 5| - 4$

x	$f(x)$	$ f(x) $
2	2	2
3	0	0
4	-2	2
5	-4	4
6	-2	2
7	0	0
8	2	2



$y = 2|x - 5| - 4$

domain: $-\infty < x < \infty$

range: $-4 \leq y < \infty$

$y = |2|x - 5| - 4|$

domain: $-\infty < x < \infty$

range: $0 \leq y < \infty$