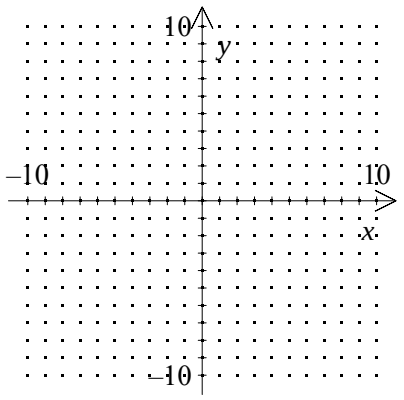
NAME:_____

1. (a) State the domain of $f(x) = \sqrt{x-5}$.
   (b) Graph the function and state the range.



[1] _____

2. What is the domain of the function $y = \sqrt{x}$?

   [A] $x \geq 1$ [B] $x \leq 1$ [C] $x \neq 0$ [D] $x \geq 0$ [E] $x \leq 0$

   [2] _____

3. What is the range of the function $y = -2x^2 + x$ when the domain is $\{1, 3, 5\}$?

   [A] $\{1, 15, 45\}$ [B] $\{-1, -15, -45\}$ [C] $\{-3, -9, -5\}$ [D] $\{5, 21, 55\}$ [E] $\{3, 9, 5\}$

   [3] _____

4. Use a calculator to find the range of the function $y = \frac{8(x-5)}{3}$ when the domain is $\{-2.2, 1.7, 8.3\}$.

   [4] _____

5. Compare the quantities in Column A and Column B.

Column A	Column B
the greatest number in the range of the function $y = x^2 + 2$ for the domain $\{1, 2, 3\}$	the least number in the range of the function $y = 2x^2$ for the domain $\{-6, -5, -4\}$

   [A] The quantity in Column A is greater. [B] The quantity in Column B is greater.

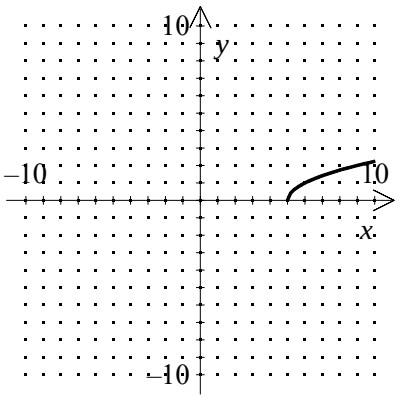
   [C] The quantities are equal.

   [D] The relationship cannot be determined from the information given.

   [5] _____

(a) domain: $\{x|x \geq 5\}$

(b) range: $\{y|y \geq 0\}$



[1] _____

[2] D

[3] B

[4] $\{-19.2, -8.8, 8.8\}$

[5] B