NO CALCULATOR

 $\begin{array}{l} \textbf{PreCalculus} \, \, \infty \, \, \textbf{Briody} \\ \textbf{Quiz} \, \, \S \textbf{1.3 Domain and Range} \end{array}$

Name:	
	8/26/2012

Question:	1	2	3	Total
Points:	2	4	3	9
Score:				

Please produce **neat** and **organized** solutions. Be sure to box your answers when appropriate. Messy or unsupported answers will receive no credit. If you would like scratch paper please ask. Good luck.

- 1. (2 points) Find the domain of $f(x) = \frac{1}{x-2}$.
- 2. (4 points) Find the domain and range of $g(x) = \sqrt{3-x} + 2$.
- 3. (3 points) Find the domain of $h(x) = \frac{1}{x-4} + \sqrt{x}$.

ANSWER KEY

Form A

- 1. $(-\infty,2)(2,\infty)$
- 2. Domain: $(-\infty, 3)$ Range: $[2, \infty]$
- 3. $[0,4) \cup (4,\infty)$

Form B

- 1. $(-\infty,4)(4,\infty)$
- 2. Domain: $(-\infty, 5)$ Range: $[4, \infty]$
- 3. $[0,6) \cup (6,\infty)$

Form \mathcal{C}

- 1. $(-\infty,6)(6,\infty)$
- 2. Domain: $(-\infty, 7)$ Range: $[6, \infty]$
- 3. $[0,8) \cup (8,\infty)$