

WAY COOL ALGEBRA
Master Johnson

Functions, Domain and Range

Evaluate each Function.

1) $y = x^2 - 7x + 15$ a) $x = 4$ b) $x = -3$	2) $f(x) = x^2 - 19x + 90$ a) $x = 6$ b) $x = -5$
3) $g(x) = -x^2 + 14x - 40$ a) $g(10)$ b) $g(-8)$	4) $h(x) = -2x^3 + x^2 - 3x$ a) $h(1)$ b) $h(-2)$
5) $y = 2x - 15$ Find x if $y = 9$	6) $f(x) = 12x - 8$ Find x if $f(x) = 40$

Make a Table of the **Domain** and **Range** of each Set of Ordered Pairs.

7) $\{ (-3, -2), (-8, 2), (-7, -4), (-7, -5) \}$	8) $\{ (-9, 8), (6, -2), (5, 8), (3, -4), (9, -2) \}$
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Given the **Domain**, find the **Range** using the function's equation.

9) Domain: $\{ 10, -8, 2 \}$ Equation: $y = -\frac{1}{2}x + 7$	10) Domain: $\{ 12, 1, 9 \}$ Equation: $f(x) = -7x + 2$
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Given the **Range**, find the **Domain** using the function's equation.

11) Range: $\{ -78, -68, 102 \}$ Equation: $y = -10x - 8$	
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