## Algebra II Worksheet \#2 Unit 3 Selected Solutions

Determine whether or not the relation given in each problem is a function. (Write yes or no.)
Yes 2. $\mathrm{B}=\{(-3,4),(-2,3),(-1,2),(0,1),(1,0),(2,-1),(3,-2)\}$
No
4. relation F

No
6. relation H



Given: Functions $\mathrm{f}=\{(\mathrm{x}, \mathrm{y}): \mathbf{y}=\mathbf{- 5 x}+\mathbf{2}\}$ and $\mathrm{g}=\left\{(\mathrm{x}, \mathrm{y}): \mathbf{y}=\mathbf{2} \mathbf{x}^{\mathbf{2}}-\mathrm{x}\right\}$. Evaluate each of the following.
8. $f(0)=\underline{2}$
10. $\mathrm{g}(-4)=\mathbf{3 6}$
12. $g(6)=\mathbf{6 6}$.

Given: Functions $H$ and $L$ defined by the equation $\mathbf{H}(\mathbf{x})=\mathbf{3 x}-\mathbf{5}$ and $\mathbf{L}(\mathbf{x})=\mathbf{- 5} \mathbf{x}^{2}+5 \mathrm{x}$.
Evaluate each of the following.
14. $\mathrm{H}(0)=\underline{-5}$
16. $L(-4)=-\mathbf{- 1 0 0}$
18. $\mathrm{L}(6)=-\mathbf{- 1 5 0}$.

Given the function P defined by this graph.
19. What is the domain of P ? [-6, 7]
20. What is the range of P ? $[-3,5]$

Evaluate each of the following.
22. $\mathrm{P}(0)=$ $\qquad$ (0, -2)
23. $\mathrm{P}(6)=-3$
$(6,-3)$

