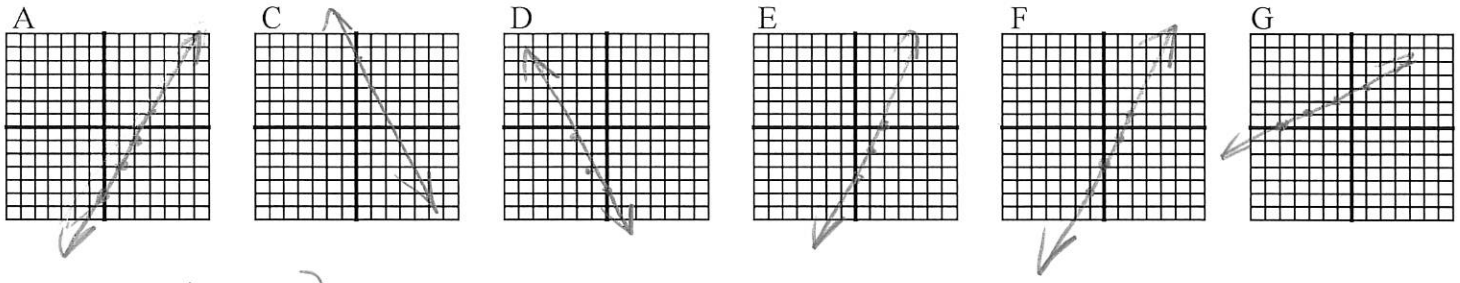
Transformations and Inverses | Ad majorem Dei gloriam | Accelerated Algebra 2 and Precalculus
Mr. Reis

Name KEY

For each equation find both algebraically and graphically:

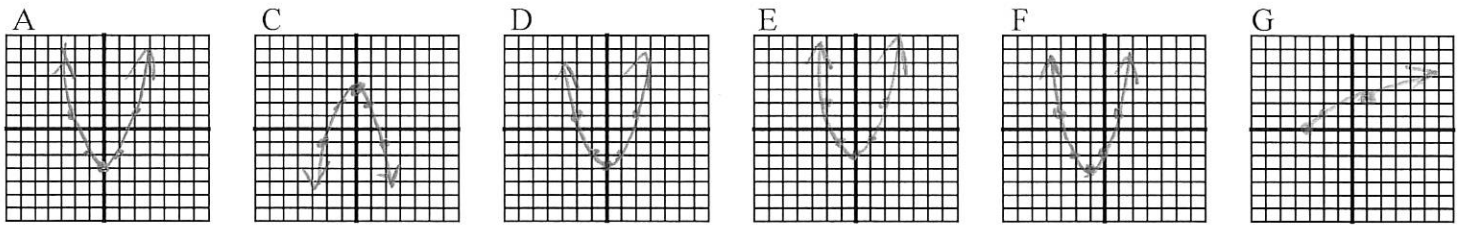
A. Graph $f(x)$
B. Domain and range
C. $-f(x)$
D. $f(-x)$
E. $f(x)+1$
F. $f(x+1)$
G. $f^{-1}(x)$, restricting the domain of $f(x)$ if necessary

✓ 1. $f(x)=2x-5$



D: $(-\infty, \infty)$
R: $(-\infty, \infty)$

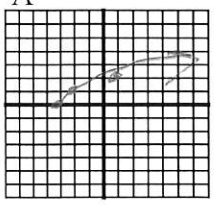
✓ 2. $f(x)=x^2-3$

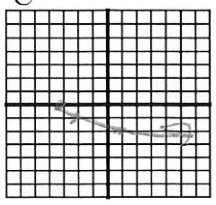


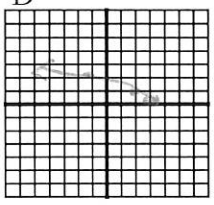
D: $(-\infty, \infty)$
R: $[-3, \infty)$

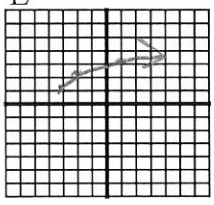
restrict domain to $x \geq 0$ for inverse

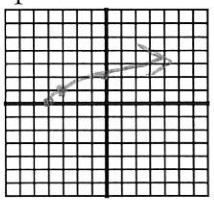
✓ 3. $f(x)=\sqrt{x-3}$

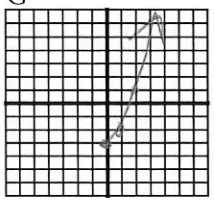
A 

C 

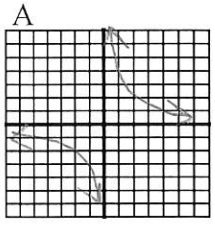
D 

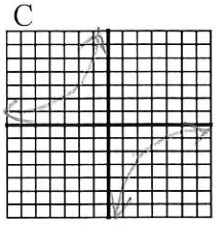
E 

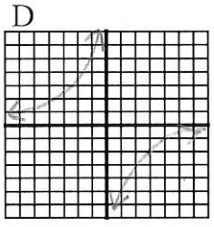
F 

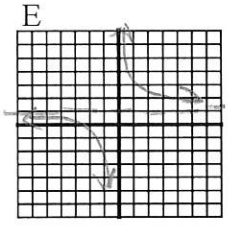
G 

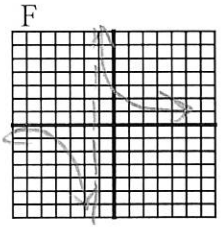
✓ 4. $f(x)=\frac{1}{x}$

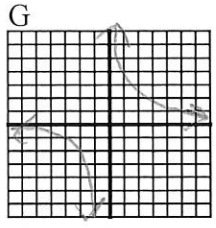
A 

C 

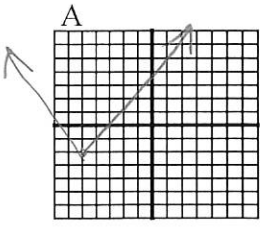
D 

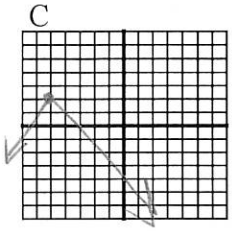
E 

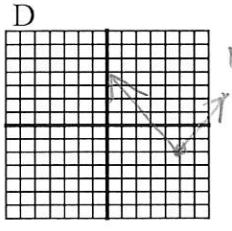
F 

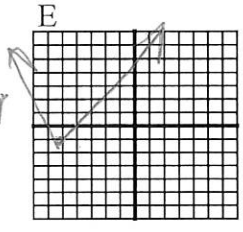
G 

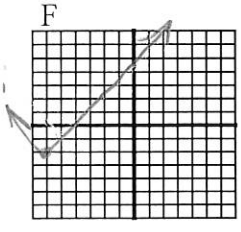
✓ 5. $f(x)=|x+5|-2$

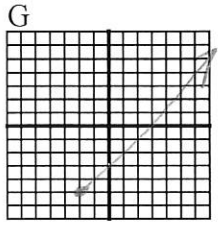
A 

C 

D 

E 

F 

G 

restrict domain to $x \geq -5$