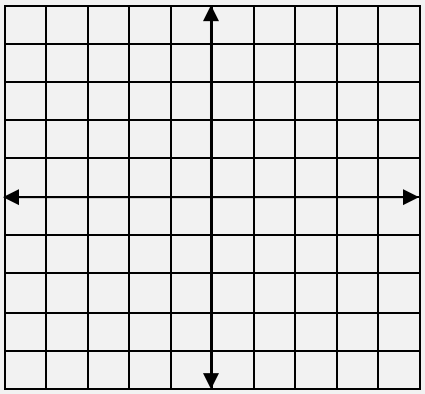
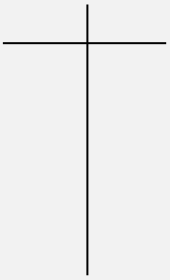
4.1 Cubic Transformations PAP Algebra 2 Notes Name:_____

Cubic Parent Function: $y = x^3$





Key Attributes:

Domain:

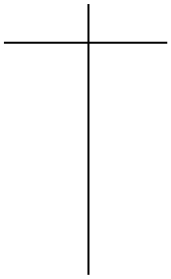
Range:

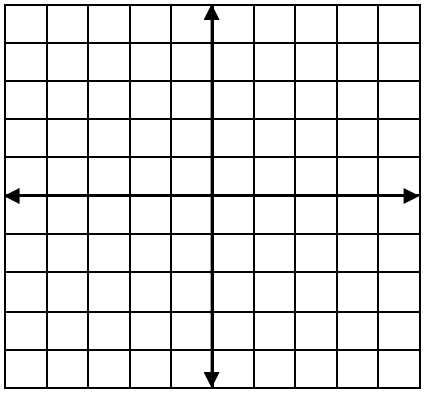
Critical Point:

End Behavior:

1. $f(x-2)+3$
Transformations:

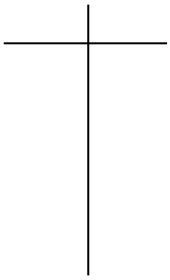
Cubic Equation:

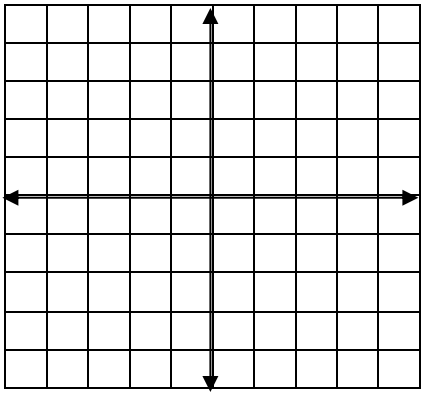




2. $-f(x)$
Transformations:

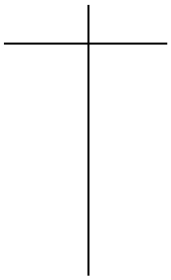
Cubic Equation:

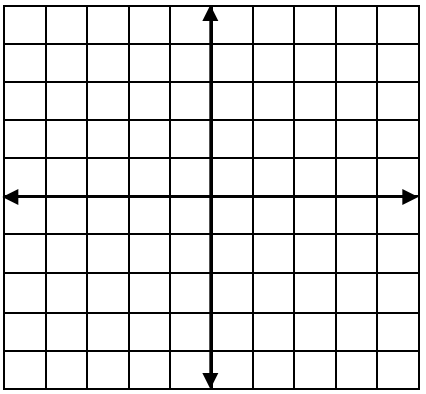




3. $f(x+1)-2$
Transformations:

Cubic Equation:

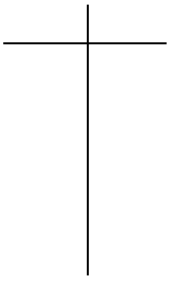


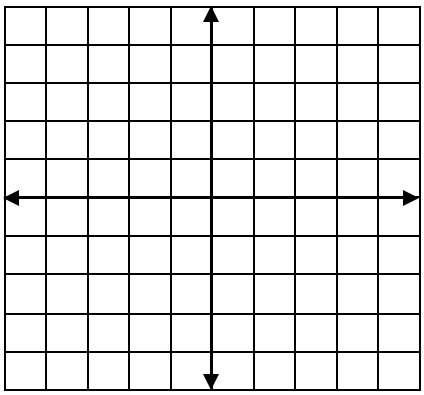


4. $\frac{1}{2}f(x-1)$

Transformations:

Cubic Equation:

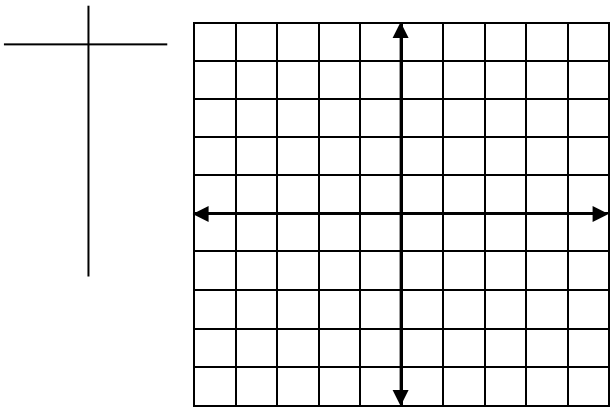




5. $2f(x)+2$

Transformations:

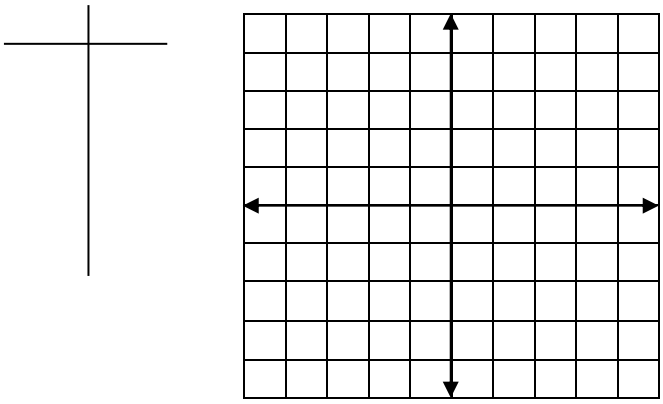
Cubic Equation:



6. $f(2x)$

Transformations:

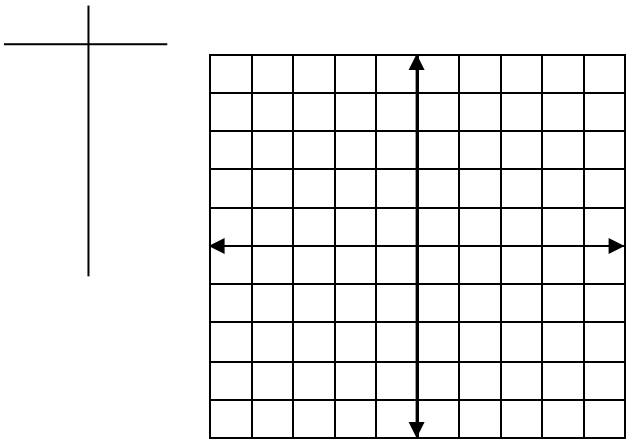
Cubic Equation:



7. $f(\frac{1}{2}(x+2))$

Transformations:

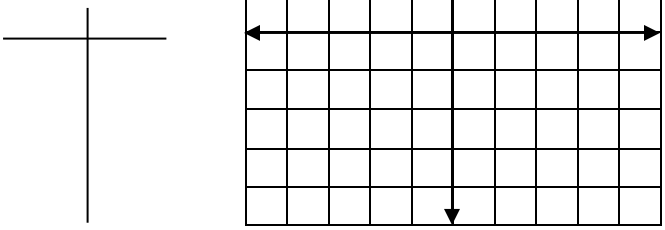
Cubic Equation:



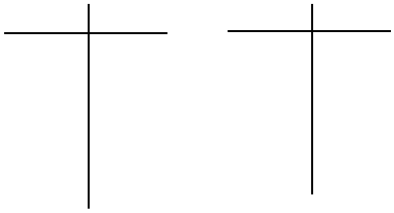
8. $3f(-x)$

Transformations:

Cubic Equation:



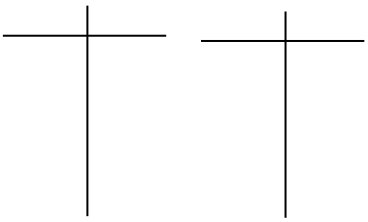
9. The graph of $y=x^3$ has been transformed so that the new critical point is (2,0) and the graph also passes through the point (3,3).



Transformations:

Cubic Equation:

10. The graph of $y=x^3$ has been transformed so that the new critical point is (-3,0) and the graph also passes through the point (-4,-8).



Transformations:

Cubic Equation: