## 4-Stretched and Compressed Transformations Classwork: Square Root

Identify the parent function, transformation, and significance of $(\mathrm{h}, \mathrm{k})$. Then make a sketch with key points.
a. $y=3 \sqrt{x+1}-4$
b. $y=0.5 \sqrt{(x+2)}+3$
c. $y=-2 \sqrt{(x-1)}+5$

Parent Family:
Parent Family:
Transformation:

Significance of $(h, k)$ :
Transformation:
Transformation:

Significance of $(h, k)$
Significance of $(h, k)$ :




## Cubic Functions

Identify the parent function, transformation, and significance of $(h, k)$. Then make a sketch with key points.
a. $y=2(x+2)^{3}-1$

Parent Family:

Transformation:

Significance of $(h, k)$ :

b. $y=0.5(x-4)^{3}+2$

Parent Family:
Transformation:

Significance of $(h, k)$ :

c. $y=-\frac{1}{4}(x+3)^{3}+1$

Parent Family:

Transformation:

Significance of $(h, k)$


## Parabolas

a. $y=2(x+3)^{2}-4$

Parent Family:
Transformation:


Significance of $(h, k)$ :
b. $y=0.5(x-2)^{2}+1$

Parent Family:
Transformation:

Significance of $(h, k)$ :

c. $y=-3(x+1)^{2}+5$

Parent Family:
Transformation:

Significance of $(h, k)$ :


