

Do Now (2/11 & 2/12)

Graph the following functions. Identify transformations.

A. $f(x) = \sqrt{2x-3} + 5$

~~B. $f(x) = 2\sqrt{x+1} - 3$~~

x	y = $\sqrt{x}$	x'	y'
0	0	$\frac{x}{2} + \frac{3}{2}$	y + 5
1	1	(1.5)	(5)
4	2	(2)	(6)
9	3	(3.5)	(7)
		(6)	(8)

$x' = 2x - 3$
+3

$\left(\frac{x'}{2} + \frac{3}{2}\right) = \frac{2}{2}x$

Transformations

- Shift + right + $\frac{3}{2}$
- Horizontal compression by $\frac{1}{2}$
- Shift + up 5