Bellwork Alg 2B Wednesday, October 11, 2017

1. Write the equation of each parent function after the given transformations.

a) Parent Function: $y = x^{\frac{5}{7}}$

Transformations: Backwards, moved 10 right, 8 down, 5 times taller.

EQ:

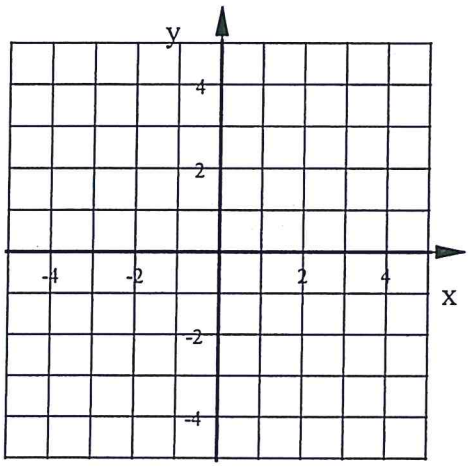
b) Parent Function: $y = Ln(x)$

Transformations: Upside down, moved 7 left, 11 up, 1/3 as tall.

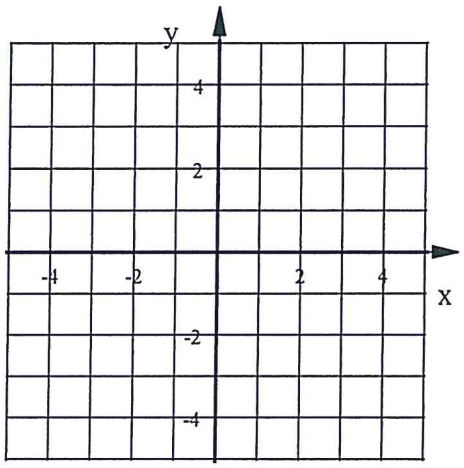
EQ:

Graph each square root function using at least three points.

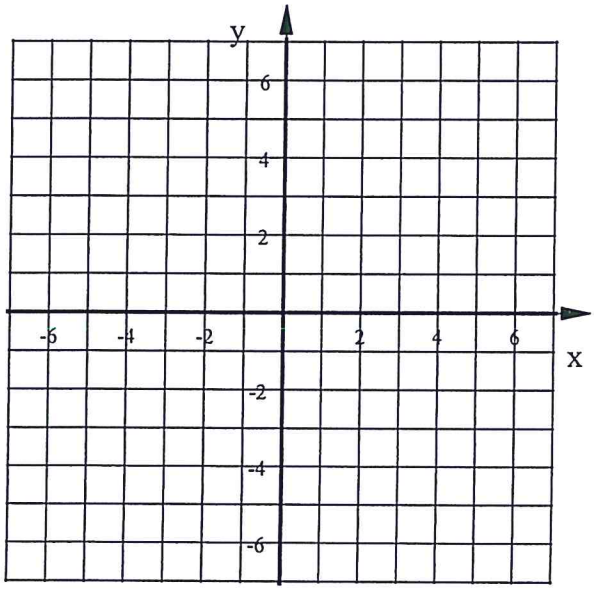
2. $y = -3\sqrt{x+4}+1$



3. $y = \frac{1}{2}\sqrt{x-1} - 4$



4. $y = -4\sqrt{-(x+2)} + 6$



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Answers

1. Write the equation of each parent function after the given transformations.

a) Parent Function: $y = x^{\frac{5}{7}}$

Transformations: Backwards, moved 10 right, 8 down, 5 times taller.

EQ: $y = 5(-(x-10))^{5/7} - 8$

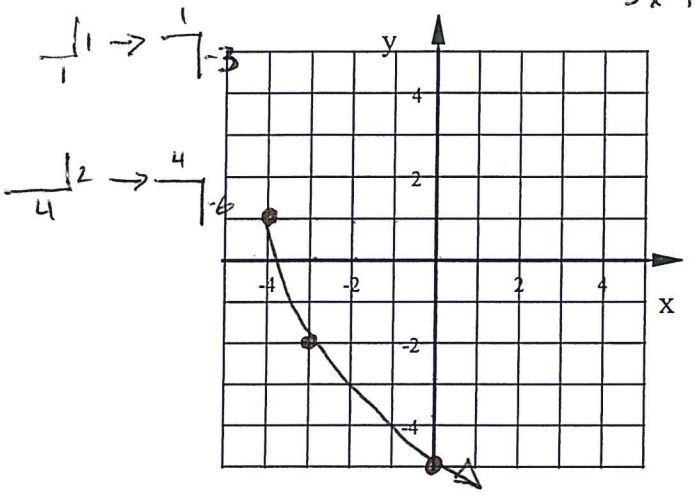
b) Parent Function: $y = Ln(x)$

Transformations: Upside down, moved 7 left, 11 up, 1/3 as tall.

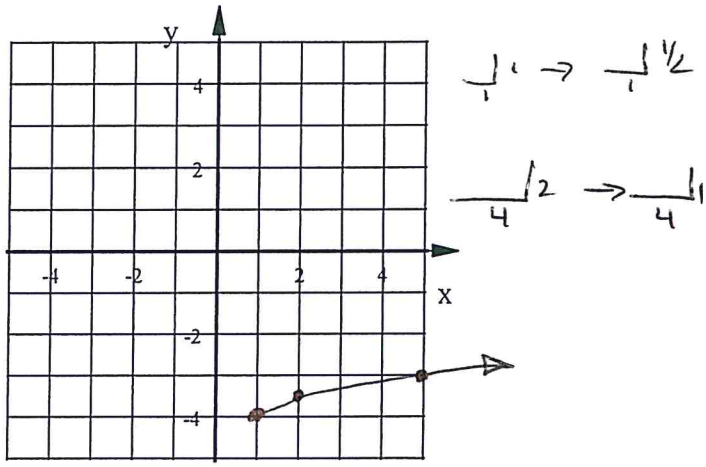
EQ: $y = -\frac{1}{3}Ln(x+7) + 11$

Graph each square root function using at least three points.

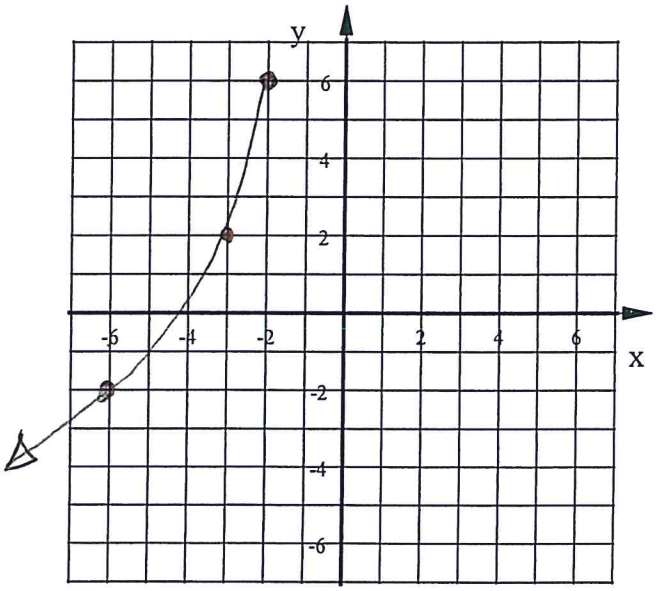
2. $y = -3\sqrt{x+4}+1$ 4 left 1 up upside down 3x taller



3. $y = \frac{1}{2}\sqrt{x-1} - 4$ 1 RT 4 DOWN $\frac{1}{2}$ as Tall



4. $y = -4\sqrt{-(x+2)} + 6$



2 left 6 up

4x taller

Backwards

upside down