

ALG 2
FCU Fams
Transformations

Tuesday's Work

Describe the transformations of the parent using proper vocabulary

1. $y = -3\sqrt[3]{\frac{1}{2}x} + 9$

2. $y = \frac{2}{3}(x+1)^2 - 4$

3. $y = \sqrt{5(x+3)} + 2$

4. $y = |-4(x-5)| + 8$

5. $y = 2\log(3(x-7)) - 2$

Write an equation given the parent function and the transformations listed

6. $y = x$; Vertical stretch of 2
Translated 5 units up

7. $y = x^3$; Vertical reflection
Horizontal stretch of 2
Translated 1 unit left, 10 units down

8. $y = 2^x$; Horizontal reflection
Translation 3 units right, 6 units up

9. $y = (\frac{1}{3})^x$; Vertical shrink of $\frac{1}{4}$
Vertical reflection
Translated 2 units left and 3 units

10. $y = \sqrt{x}$; Horizontal shrink of 3 down
Translated 6 units left

Recall model: $ff = a f(b(x-h)) + k$

where $f(x)$ is

ANY parent

Then do pg. 844 15-26 Factor using ANY of our 3 methods