

Homework: Inverse Functions - Key

In Problems 1-5, determine whether f and g are inverses of each other

1. Inverses	2. Inverses
3. Not Inverses	4. Inverses
5. Not Inverses	

In Problems 6-14, find the inverse of the function

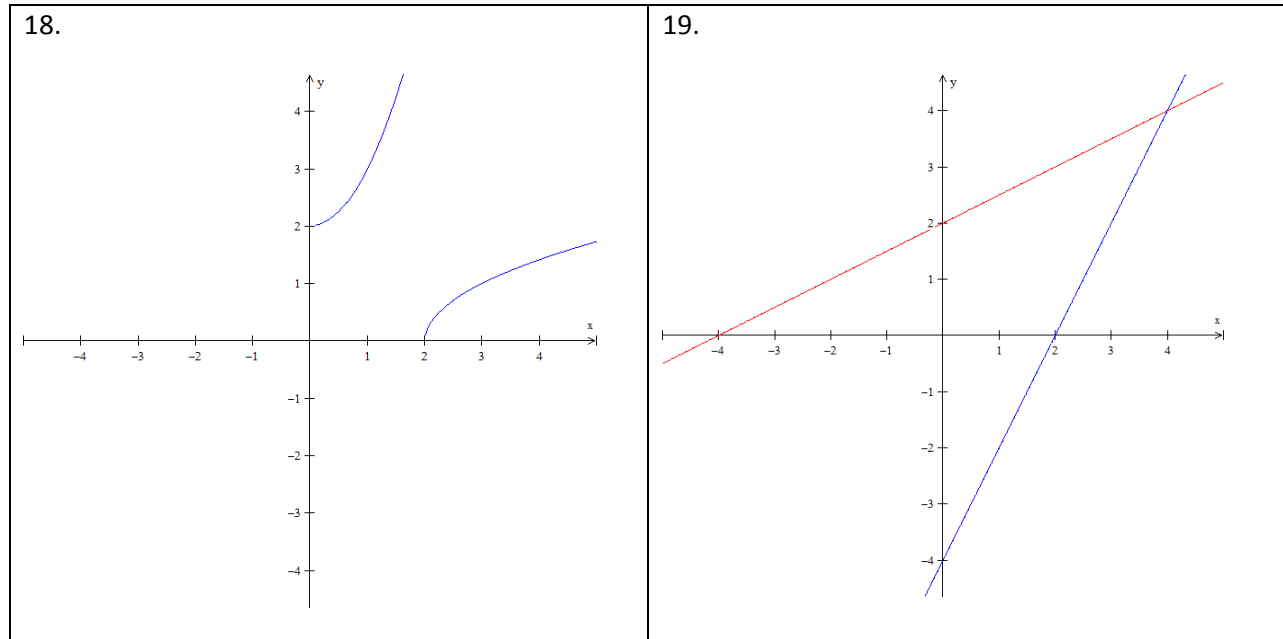
6. $f^{-1}(x) = \frac{1}{7}x + \frac{1}{7}$	7. $f^{-1}(x) = \frac{1}{8}x - \frac{1}{4}$
8. $f^{-1}(x) = \frac{1}{5}x + \frac{1}{5}$	9. $f^{-1}(x) = \sqrt[3]{x+5}$
10. $f^{-1}(x) = -1 + \sqrt[3]{x}$	11. $f^{-1}(x) = \frac{5}{x}$
12. $f^{-1}(x) = x^2 + 1, x \geq 0$	13. $f^{-1}(x) = \frac{8}{x+2}, x \neq -2$
14. $f^{-1}(x) = \frac{4x+1}{x-9}, x \neq 9$	

In Problems 15-17, determine which graphs represent functions that have inverse functions

15. No inverse	16. Has Inverse
17. No Inverse	

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In Problems 18-19, use the graph of f to draw the graph of its inverse function



In Problems 20-26, find the inverse of the function

20. $f^{-1}(x) = \frac{1}{10}x - \frac{1}{10}$	21. $f^{-1}(x) = \sqrt{x+2}, x \geq -2$
22. $f^{-1}(x) = -3 - \sqrt{x}, x \geq 0$	23. $f^{-1}(x) = \sqrt[3]{x-4}$
24. $f^{-1}(x) = \sqrt[5]{x} + 2$	25. $f^{-1}(x) = x^2 - 3, x \geq 0$
26. $f^{-1}(x) = (x-4)^3$	