Name: _____ Date: _____

Find Inverse Functions Relations - Medium

Find the inverse of each function.

1. $f(x) = x^3 + 1$
2. $f(x) = \sqrt{x - 9},\ x \geq 9$
3. $f(x) = x^3 - 7$
4. $f(x) = \sqrt{x - 8},\ x \geq 8$
5. $f(x) = \sqrt{x - 7},\ x \geq 7$
6. $f(x) = x^3 - 3$
7. $f(x) = x^3 + 2$
8. $f(x) = \sqrt{x - 5},\ x \geq 5$
9. $f(x) = x^3 + 9$
10. $f(x) = x^3 - 4$

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Find Inverse Functions Relations - Medium

Find the inverse of each function.

11. $f(x) = \sqrt{x - 4},\ x \geq 4$

12. $f(x) = \sqrt{x - 3},\ x \geq 3$

13. $f(x) = \sqrt{x - 6},\ x \geq 6$

14. $f(x) = \sqrt{x - 2},\ x \geq 2$

15. $f(x) = x^3 - 1$

16. $f(x) = x^3 - 6$

17. $f(x) = \sqrt{x - 1},\ x \geq 1$

18. $f(x) = x^3 + 8$

19. $f(x) = x^3 + 5$

20. $f(x) = x^3 - 8$

Find Inverse Functions Relations - Medium - Answer Key

1. $f(x) = x^3 + 1$

   $f^{-1}(x) = \sqrt[3]{x - 1}$

2. $f(x) = \sqrt{x - 9},\ x \geq 9$

   $f^{-1}(x) = x^2 + 9,\ x \geq 0$

3. $f(x) = x^3 - 7$

   $f^{-1}(x) = \sqrt[3]{x + 7}$

4. $f(x) = \sqrt{x - 8},\ x \geq 8$

   $f^{-1}(x) = x^2 + 8,\ x \geq 0$

5. $f(x) = \sqrt{x - 7},\ x \geq 7$

   $f^{-1}(x) = x^2 + 7,\ x \geq 0$

6. $f(x) = x^3 - 3$

   $f^{-1}(x) = \sqrt[3]{x + 3}$

7. $f(x) = x^3 + 2$

   $f^{-1}(x) = \sqrt[3]{x - 2}$

8. $f(x) = \sqrt{x - 5},\ x \geq 5$

   $f^{-1}(x) = x^2 + 5,\ x \geq 0$

9. $f(x) = x^3 + 9$

   $f^{-1}(x) = \sqrt[3]{x - 9}$

10. $f(x) = x^3 - 4$

    $f^{-1}(x) = \sqrt[3]{x + 4}$

Find Inverse Functions Relations - Medium - Answer Key

11. $f(x) = \sqrt{x-4},\ x \geq 4$

$f^{-1}(x) = x^2 + 4,\ x \geq 0$

12. $f(x) = \sqrt{x-3},\ x \geq 3$

$f^{-1}(x) = x^2 + 3,\ x \geq 0$

13. $f(x) = \sqrt{x-6},\ x \geq 6$

$f^{-1}(x) = x^2 + 6,\ x \geq 0$

14. $f(x) = \sqrt{x-2},\ x \geq 2$

$f^{-1}(x) = x^2 + 2,\ x \geq 0$

15. $f(x) = x^3 - 1$

$f^{-1}(x) = \sqrt[3]{x+1}$

16. $f(x) = x^3 - 6$

$f^{-1}(x) = \sqrt[3]{x+6}$

17. $f(x) = \sqrt{x-1},\ x \geq 1$

$f^{-1}(x) = x^2 + 1,\ x \geq 0$

18. $f(x) = x^3 + 8$

$f^{-1}(x) = \sqrt[3]{x-8}$

19. $f(x) = x^3 + 5$

$f^{-1}(x) = \sqrt[3]{x-5}$

20. $f(x) = x^3 - 8$

$f^{-1}(x) = \sqrt[3]{x+8}$