

1. What is the domain of the function $f(x) = x^2 - 2$?
 - A. All real numbers
 - B. All positive real numbers
 - C. All negative real numbers
 - D. All non-zero real numbers
2. What is the range of the function $f(x) = x^2 - 2$?
 - A. All real numbers
 - B. All positive real numbers
 - C. All negative real numbers
 - D. All non-zero real numbers
3. What is the inverse of the function $f(x) = x^2 - 2$?
 - A. $f(x) = x^2 - 2$
 - B. $f(x) = x^2 + 2$
 - C. $f(x) = -x^2 + 2$
 - D. $f(x) = -x^2 - 2$
4. What is the domain of the inverse of the function $f(x) = x^2 - 2$?
 - A. All real numbers
 - B. All positive real numbers
 - C. All negative real numbers
 - D. All non-zero real numbers
5. What is the range of the inverse of the function $f(x) = x^2 - 2$?
 - A. All real numbers
 - B. All positive real numbers
 - C. All negative real numbers
 - D. All non-zero real numbers
6. What is the domain of the function $f(x) = |x|$?
 - A. All real numbers
 - B. All positive real numbers
 - C. All negative real numbers
 - D. All non-zero real numbers
7. What is the range of the function $f(x) = |x|$?
 - A. All real numbers
 - B. All positive real numbers
 - C. All negative real numbers
 - D. All non-zero real numbers
8. What is the inverse of the function $f(x) = |x|$?
 - A. $f(x) = -|x|$
 - B. $f(x) = |x|$
 - C. $f(x) = 1/|x|$
 - D. There is no inverse function.
9. What is the domain of the inverse of the function $f(x) = |x|$?

- A. All real numbers
- B. All positive real numbers
- C. All negative real numbers
- D. All non-zero real numbers

10. What is the range of the inverse of the function $f(x) = |x|$?

- A. All real numbers
- B. All positive real numbers
- C. All negative real numbers
- D. All non-zero real numbers

11. What is the domain of the function $f(x) = 1/x$?

- A. All real numbers
- B. All positive real numbers
- C. All negative real numbers
- D. All non-zero real numbers

12. What is the range of the function $f(x) = 1/x$?

- A. All real numbers
- B. All positive real numbers
- C. All negative real numbers
- D. All non-zero real numbers

13. What is the inverse of the function $f(x) = 1/x$?

- A. $f(x) = 1/x$
- B. $f(x) = -1/x$
- C. $f(x) = x/|x|$
- D. There is no inverse function.

14. What is the domain of the inverse of the function $f(x) = 1/x$?

- A. All real numbers
- B. All positive real numbers
- C. All negative real numbers
- D. All non-zero real numbers

15. What is the range of the inverse of the function $f(x) = 1/x$?

- A. All real numbers
- B. All positive real numbers
- C. All negative real numbers
- D. All non-zero real numbers

16. What is the domain of the function $f(x) = \sqrt{x}$?

- A. All real numbers
- B. All positive real numbers
- C. All negative real numbers
- D. All non-zero real numbers

17. What is the range of the function $f(x) = \sqrt{x}$?

- A. All real numbers
- B. All positive real numbers

- C. All negative real numbers
- D. All non-zero real numbers

18. What is the inverse of the function $f(x) = \sqrt{x}$?

- A. $f(x) = \sqrt{x}$
- B. $f(x) = -\sqrt{x}$
- C. $f(x) = 1/\sqrt{x}$
- D. There is no inverse function.

19. What is the domain of the inverse of the function $f(x) = \sqrt{x}$?

- A. All real numbers
- B. All positive real numbers
- C. All negative real numbers
- D. All non-zero real numbers

20. What is the range of the inverse of the function $f(x) = \sqrt{x}$?

- A. All real numbers
- B. All positive real numbers
- C. All negative real numbers
- D. All non-zero real numbers

Answer Key: 1-A, 2-A, 3-C, 4-A, 5-A, 6-A, 7-A, 8-A, 9-A, 10-A, 11-D, 12-A, 13-D, 14-D, 15-D, 16-B, 17-B, 18-C, 19-B, 20-B