

1. Suppose f and g are differentiable functions where $g(x) = f^{-1}(x)$ for all x . Suppose further that

$$\begin{aligned}f(4) &= 5, & f(3) &= 7, & f(7) &= 4, & f(5) &= 3 \\f'(4) &= -9, & f'(3) &= 10, & f'(7) &= -7, & f'(5) &= 6\end{aligned}$$

Find $g'(5)$.

2. Suppose f and g are differentiable functions where $g(x) = f^{-1}(x)$ for all x . Suppose further that

$$\begin{aligned}f(6) &= 2, & f(2) &= 7, & f(1) &= 6, & f(7) &= 1 \\f'(6) &= 2, & f'(2) &= -9, & f'(1) &= 4, & f'(7) &= 1\end{aligned}$$

Find $g'(1)$.

3. Suppose f and g are differentiable functions where $g(x) = f^{-1}(x)$ for all x . Suppose further that

$$\begin{aligned}f(2) &= -3, & f(7) &= 2, & f(-3) &= -8, & f(-8) &= 7 \\f'(2) &= 2, & f'(7) &= 8, & f'(-3) &= 4, & f'(-8) &= 5\end{aligned}$$

Find $g'(-3)$.

4. Suppose f and g are differentiable functions where $g(x) = f^{-1}(x)$ for all x . Suppose further that

$$\begin{aligned}f(1) &= 7, & f(-8) &= 1, & f(7) &= -3, & f(-3) &= -8 \\f'(1) &= -10, & f'(-8) &= -4, & f'(7) &= 8, & f'(-3) &= 10\end{aligned}$$

Find $g'(7)$.

5. Suppose f and g are differentiable functions where $g(x) = f^{-1}(x)$ for all x . Suppose further that

$$\begin{aligned}f(6) &= 0, & f(-3) &= 6, & f(0) &= 7, & f(7) &= -3 \\f'(6) &= -4, & f'(-3) &= 5, & f'(0) &= 7, & f'(7) &= 4\end{aligned}$$

Find $g'(7)$.

6. Suppose f and g are differentiable functions where $g(x) = f^{-1}(x)$ for all x . Suppose further that

$$\begin{aligned}f(9) &= -6, & f(10) &= 6, & f(6) &= 10, & f(-6) &= 9 \\f'(9) &= 1, & f'(10) &= 2, & f'(6) &= 9, & f'(-6) &= -1\end{aligned}$$

Find $g'(10)$.

7. Suppose f and g are differentiable functions where $g(x) = f^{-1}(x)$ for all x . Suppose further that

$$\begin{aligned}f(7) &= -1, & f(4) &= 7, & f(3) &= 4, & f(-1) &= 3 \\f'(7) &= -4, & f'(4) &= 4, & f'(3) &= 8, & f'(-1) &= -6\end{aligned}$$

Find $g'(7)$.

8. Suppose f and g are differentiable functions where $g(x) = f^{-1}(x)$ for all x . Suppose further that

$$\begin{aligned} f(-9) &= 7, & f(8) &= 6, & f(6) &= -9, & f(7) &= 8 \\ f'(-9) &= 6, & f'(8) &= 4, & f'(6) &= -4, & f'(7) &= 3 \end{aligned}$$

Find $g'(-9)$.

9. Suppose f and g are differentiable functions where $g(x) = f^{-1}(x)$ for all x . Suppose further that

$$\begin{aligned} f(3) &= -9, & f(-9) &= -2, & f(9) &= 3, & f(-2) &= 9 \\ f'(3) &= 8, & f'(-9) &= -4, & f'(9) &= -10, & f'(-2) &= -5 \end{aligned}$$

Find $g'(-9)$.

10. Suppose f and g are differentiable functions where $g(x) = f^{-1}(x)$ for all x . Suppose further that

$$\begin{aligned} f(3) &= 6, & f(6) &= -9, & f(-9) &= -1, & f(-1) &= 3 \\ f'(3) &= 10, & f'(6) &= 4, & f'(-9) &= 1, & f'(-1) &= 7 \end{aligned}$$

Find $g'(-9)$.

11. Suppose f and g are differentiable functions where $g(x) = f^{-1}(x)$ for all x . Suppose further that

$$\begin{aligned} f(-3) &= 0, & f(0) &= 8, & f(1) &= -3, & f(8) &= 1 \\ f'(-3) &= -8, & f'(0) &= -10, & f'(1) &= -9, & f'(8) &= -6 \end{aligned}$$

Find $g'(-3)$.

12. Suppose f and g are differentiable functions where $g(x) = f^{-1}(x)$ for all x . Suppose further that

$$\begin{aligned} f(0) &= 1, & f(-3) &= 3, & f(3) &= 0, & f(1) &= -3 \\ f'(0) &= -10, & f'(-3) &= -7, & f'(3) &= 4, & f'(1) &= -9 \end{aligned}$$

Find $g'(-3)$.

13. Suppose f and g are differentiable functions where $g(x) = f^{-1}(x)$ for all x . Suppose further that

$$\begin{aligned} f(-9) &= 9, & f(-7) &= 7, & f(9) &= -7, & f(7) &= -9 \\ f'(-9) &= -5, & f'(-7) &= 1, & f'(9) &= 5, & f'(7) &= 10 \end{aligned}$$

Find $g'(7)$.

14. Suppose f and g are differentiable functions where $g(x) = f^{-1}(x)$ for all x . Suppose further that

$$\begin{aligned} f(9) &= -10, & f(-10) &= 1, & f(1) &= 8, & f(8) &= 9 \\ f'(9) &= -7, & f'(-10) &= -2, & f'(1) &= -8, & f'(8) &= -10 \end{aligned}$$

Find $g'(-10)$.

15. Suppose f and g are differentiable functions where $g(x) = f^{-1}(x)$ for all x . Suppose further that

$$\begin{aligned} f(-4) &= 4, & f(4) &= 7, & f(-1) &= -4, & f(7) &= -1 \\ f'(-4) &= -6, & f'(4) &= 2, & f'(-1) &= -8, & f'(7) &= -4 \end{aligned}$$

Find $g'(7)$.

16. Suppose f and g are differentiable functions where $g(x) = f^{-1}(x)$ for all x . Suppose further that

$$\begin{aligned} f(10) &= -4, & f(4) &= 10, & f(-6) &= 4, & f(-4) &= -6 \\ f'(10) &= 10, & f'(4) &= 9, & f'(-6) &= -3, & f'(-4) &= -5 \end{aligned}$$

Find $g'(10)$.

17. Suppose f and g are differentiable functions where $g(x) = f^{-1}(x)$ for all x . Suppose further that

$$\begin{aligned} f(-7) &= 2, & f(2) &= -7, & f(0) &= 7, & f(7) &= 0 \\ f'(-7) &= -6, & f'(2) &= 5, & f'(0) &= -8, & f'(7) &= 1 \end{aligned}$$

Find $g'(7)$.

18. Suppose f and g are differentiable functions where $g(x) = f^{-1}(x)$ for all x . Suppose further that

$$\begin{aligned} f(7) &= 2, & f(-7) &= 7, & f(-1) &= -7, & f(2) &= -1 \\ f'(7) &= 4, & f'(-7) &= 1, & f'(-1) &= -7, & f'(2) &= 10 \end{aligned}$$

Find $g'(2)$.

19. Suppose f and g are differentiable functions where $g(x) = f^{-1}(x)$ for all x . Suppose further that

$$\begin{aligned} f(10) &= -7, & f(9) &= 10, & f(-10) &= 9, & f(-7) &= -10 \\ f'(10) &= -3, & f'(9) &= -5, & f'(-10) &= 1, & f'(-7) &= 2 \end{aligned}$$

Find $g'(-7)$.

20. Suppose f and g are differentiable functions where $g(x) = f^{-1}(x)$ for all x . Suppose further that

$$\begin{aligned} f(10) &= -4, & f(-2) &= 10, & f(2) &= -2, & f(-4) &= 2 \\ f'(10) &= -4, & f'(-2) &= -1, & f'(2) &= 9, & f'(-4) &= 5 \end{aligned}$$

Find $g'(-2)$.