

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

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

Find  $g'(4)$ .

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

$$\begin{aligned}f(8) &= 10, & f(10) &= 8, & f(-7) &= -1, & f(-1) &= -7 \\f'(8) &= 5, & f'(10) &= 7, & f'(-7) &= 6, & f'(-1) &= 10\end{aligned}$$

Find  $g'(10)$ .

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

$$\begin{aligned}f(5) &= -8, & f(2) &= 5, & f(-8) &= 3, & f(3) &= 2 \\f'(5) &= -9, & f'(2) &= 3, & f'(-8) &= 5, & f'(3) &= -7\end{aligned}$$

Find  $g'(3)$ .

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

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

Find  $g'(3)$ .

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

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

Find  $g'(3)$ .

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

$$\begin{aligned}f(-2) &= -8, & f(-8) &= -1, & f(-5) &= -2, & f(-1) &= -5 \\f'(-2) &= 1, & f'(-8) &= 3, & f'(-5) &= 4, & f'(-1) &= -5\end{aligned}$$

Find  $g'(-8)$ .

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

$$\begin{aligned}f(-2) &= -5, & f(-5) &= -8, & f(-8) &= 3, & f(3) &= -2 \\f'(-2) &= 8, & f'(-5) &= 3, & f'(-8) &= 6, & f'(3) &= 4\end{aligned}$$

Find  $g'(-2)$ .

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

$$\begin{aligned}f(10) &= -8, & f(7) &= -4, & f(-4) &= 10, & f(-8) &= 7 \\f'(10) &= -2, & f'(7) &= 0, & f'(-4) &= 5, & f'(-8) &= 9\end{aligned}$$

Find  $g'(10)$ .

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

$$\begin{aligned}f(-4) &= -5, & f(-5) &= 0, & f(0) &= -7, & f(-7) &= -4 \\f'(-4) &= 9, & f'(-5) &= 4, & f'(0) &= -10, & f'(-7) &= 10\end{aligned}$$

Find  $g'(-5)$ .

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

$$\begin{aligned}f(-1) &= 5, & f(5) &= -6, & f(-6) &= 4, & f(4) &= -1 \\f'(-1) &= 5, & f'(5) &= 8, & f'(-6) &= -10, & f'(4) &= 3\end{aligned}$$

Find  $g'(4)$ .

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

$$\begin{aligned}f(10) &= -5, & f(4) &= -6, & f(-6) &= 10, & f(-5) &= 4 \\f'(10) &= -1, & f'(4) &= 1, & f'(-6) &= -8, & f'(-5) &= 10\end{aligned}$$

Find  $g'(-5)$ .

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

$$\begin{aligned}f(0) &= 1, & f(1) &= 0, & f(-3) &= -4, & f(-4) &= -3 \\f'(0) &= -8, & f'(1) &= 4, & f'(-3) &= -5, & f'(-4) &= -10\end{aligned}$$

Find  $g'(-4)$ .

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

$$\begin{aligned}f(6) &= 8, & f(4) &= -8, & f(8) &= 4, & f(-8) &= 6 \\f'(6) &= 0, & f'(4) &= 10, & f'(8) &= -5, & f'(-8) &= -10\end{aligned}$$

Find  $g'(6)$ .

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

$$\begin{aligned}f(5) &= -4, & f(-4) &= -2, & f(-2) &= -6, & f(-6) &= 5 \\f'(5) &= 3, & f'(-4) &= 10, & f'(-2) &= -10, & f'(-6) &= 6\end{aligned}$$

Find  $g'(-6)$ .

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

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

Find  $g'(3)$ .

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

$$\begin{aligned} f(-8) &= 1, & f(3) &= 10, & f(1) &= 3, & f(10) &= -8 \\ f'(-8) &= 5, & f'(3) &= -9, & f'(1) &= -10, & f'(10) &= 10 \end{aligned}$$

Find  $g'(10)$ .

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

$$\begin{aligned} f(1) &= -6, & f(-8) &= -7, & f(-7) &= -8, & f(-6) &= 1 \\ f'(1) &= 1, & f'(-8) &= 0, & f'(-7) &= 5, & f'(-6) &= 10 \end{aligned}$$

Find  $g'(-8)$ .

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

$$\begin{aligned} f(-8) &= 8, & f(3) &= -8, & f(8) &= -6, & f(-6) &= 3 \\ f'(-8) &= 2, & f'(3) &= 3, & f'(8) &= 5, & f'(-6) &= 4 \end{aligned}$$

Find  $g'(-8)$ .

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

$$\begin{aligned} f(3) &= -2, & f(5) &= 10, & f(-2) &= 5, & f(10) &= 3 \\ f'(3) &= -4, & f'(5) &= -5, & f'(-2) &= 5, & f'(10) &= 6 \end{aligned}$$

Find  $g'(-2)$ .

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

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

Find  $g'(-5)$ .