

Find $[f \circ g](3)$ and $[g \circ f](3)$.

19. $f(x) = x$
 $g(x) = -x$

21. $f(x) = x + 1$
 $g(x) = x^2 + 6$

23. $f = \{(-1, 9), (3, 6)\}$
 $g = \{(-5, 3), (6, 12), (3, -1)\}$

20. $f(x) = x^2$
 $g(x) = x^3$

22. $f = \{(1, -7), (2, 3), (3, 0)\}$
 $g = \{(0, 11), (3, 1)\}$

24. $f(x) = 7x - 5$
 $g(x) = x^2 - 3x + 7$

Find $g[h(x)]$ and $h[g(x)]$.

25. $g(x) = x + 7$
 $h(x) = x + 4$

26. $g(x) = 5x$
 $h(x) = 2x$

27. $g(x) = x - 2$
 $h(x) = x^2$

28. $g(x) = -2x$
 $h(x) = -3x + 1$

29. $g(x) = x + 1$
 $h(x) = x^3$

30. $g(x) = |x|$
 $h(x) = x - 3$

If $f(x) = x^2$, $g(x) = 4x$, and $h(x) = x - 1$, find each value.

31. $h[g(2)]$

32. $[f \circ g](4)$

33. $[h \circ f](3)$

34. $[f \circ h](-3)$

35. $h[g(-2)]$

36. $h[f(-4)]$

37. $g[f(x)]$

38. $[f \circ g](x)$

39. $[f \circ (g \circ h)](x)$