Algebra 2

Name_____

Musical Chairs #3

Date_____ Period_____

State if the given functions are inverses.

1) $g(x) = \sqrt[5]{x-2}$
   $f(x) = x^5 + 2$

Sketch the graph of each function.

2) $y = \dfrac{1}{4} \cdot 5^x$
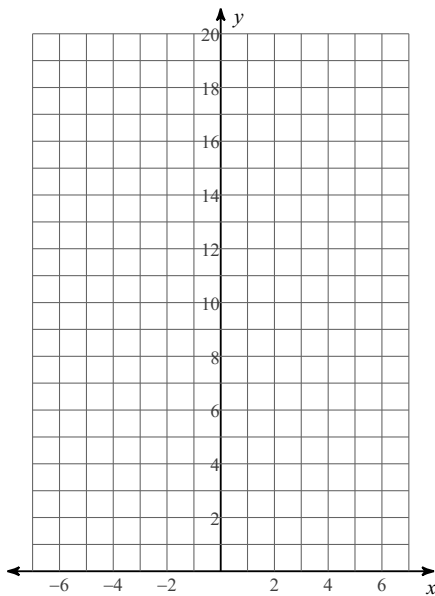
Perform the indicated operation.

3) $h(t) = 3t + 1$
   $g(t) = 3t + 4$
   Find $(h \circ g)(t)$

4) $g(x) = 4x + 1$
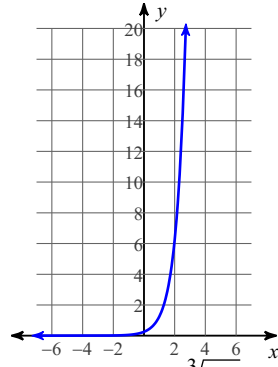 $h(x) = -x^2 - x$
   Find $(g \circ h)(6)$

Find the inverse of each function.

5) $g(x) = -2(x-1)^3$

Answers to Musical Chairs #3

1) Yes

2)

3) $9t + 13$

4) -167

5) $g^{-1}(x) = \dfrac{2 - \sqrt[3]{4x}}{2}$