

## Inverse Functions Day 3

State if the given functions are inverses.

$$1) \quad g(x) = \frac{x+5}{6}$$
$$f(x) = 6x - 5$$

$$2) \quad f(x) = 1 - 2x^3$$
$$g(x) = (x-1)^3 + 1$$

$$3) \quad g(x) = \frac{2}{x} - 3$$
$$f(x) = \frac{2}{x} + 2$$

$$4) \quad g(n) = \sqrt[5]{-\frac{n}{2}}$$
$$f(n) = -2n^5$$

Find the inverse of each function.

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

$$6) \quad f(x) = -1 + \frac{1}{5}x$$

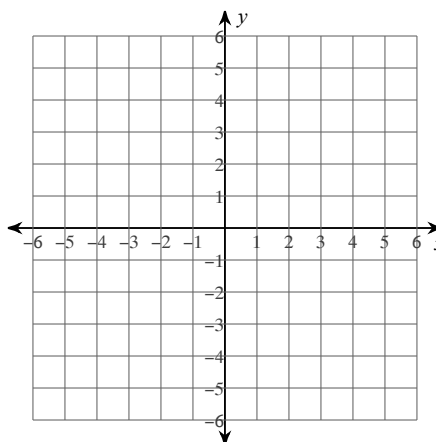
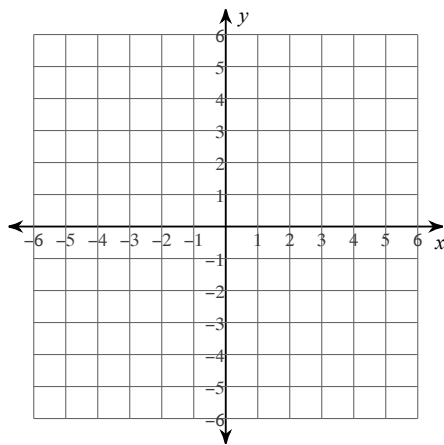
$$7) g(x) = x^3 + 3$$

$$8) g(x) = \sqrt[3]{x} + 2$$

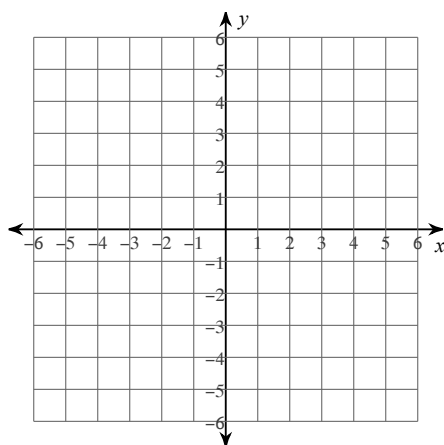
**Graph the function. Graph its inverse by using points from the function graph and switching the ordered pair  $(x, y) \rightarrow (y, x)$ .**

$$9) f(x) = \frac{-8 + x}{2}$$

$$10) g(x) = 3x - 6$$



$$11) h(x) = \sqrt[3]{x-2} - 2$$



$$12) g(n) = (n+2)^5 - 3$$

