

Inverses

Find the inverse of each function.

1) $f(x) = \sqrt[3]{\frac{-x+2}{2}}$

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

3) $h(x) = 2x^3 - 3$

4) $g(x) = 3 + (x-2)^5$

5) $f(x) = x^3 + 3$

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

7) $y = \log(-2x)$

8) $y = \log_5 x^2$

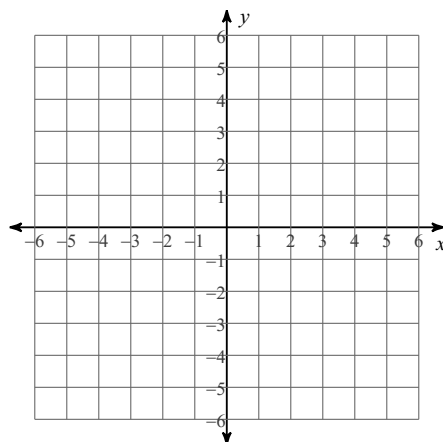
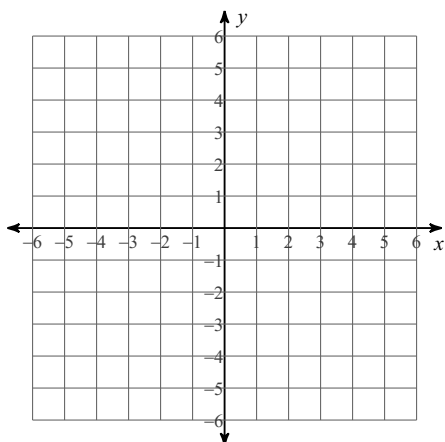
9) $y = -\frac{e^x}{2}$

10) $y = 4^{\frac{x}{3}}$

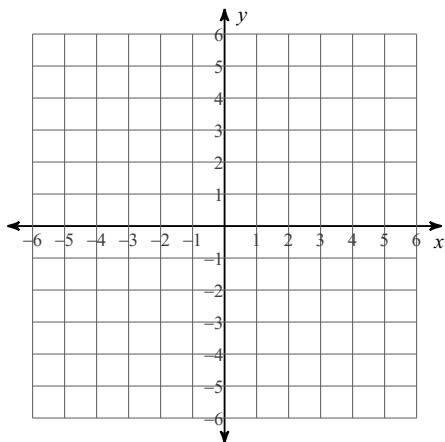
Find the inverse of each function. Then graph the function and its inverse.

11) $g(x) = \frac{\sqrt[3]{4x}}{2}$

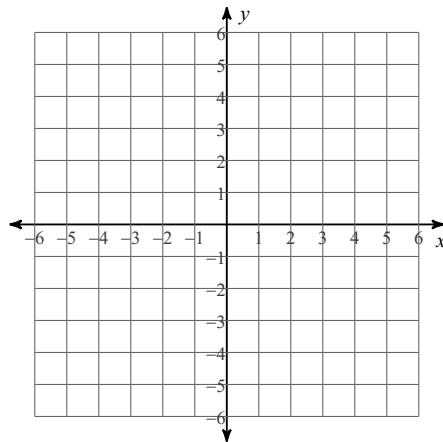
12) $h(x) = 3 + 2x^5$



$$13) f(x) = \frac{2x - 2}{3}$$



$$14) f(x) = 5x + 1$$



State if the given functions are inverses.

$$15) \begin{aligned} g(x) &= 2x - 1 \\ f(x) &= 3 - \frac{1}{2}x \end{aligned}$$

$$16) \begin{aligned} f(x) &= x^3 \\ g(x) &= \frac{2 - \sqrt[3]{4x}}{2} \end{aligned}$$

$$17) \begin{aligned} h(x) &= \frac{1}{3}x - \frac{2}{3} \\ f(x) &= 2x - 5 \end{aligned}$$

$$18) \begin{aligned} f(x) &= \sqrt[5]{x - 3} + 1 \\ h(x) &= (x - 1)^5 + 3 \end{aligned}$$