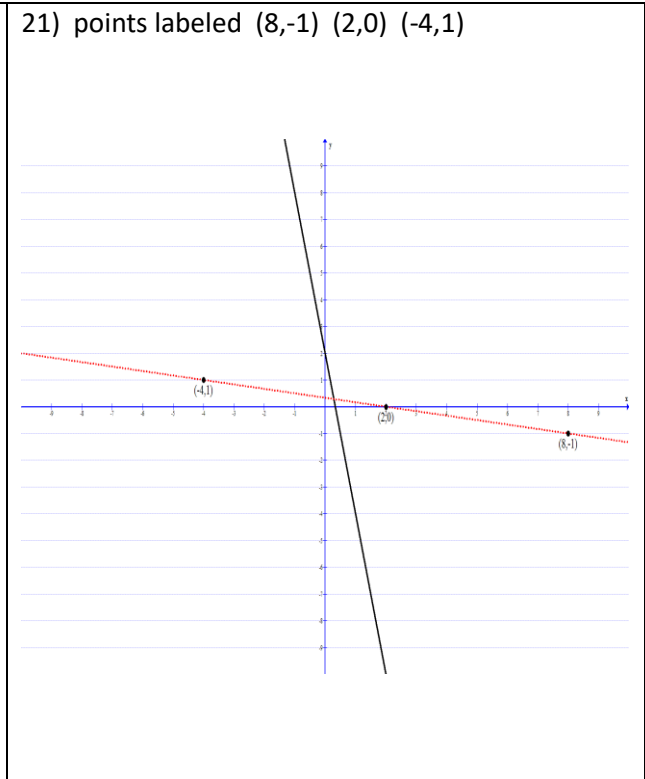
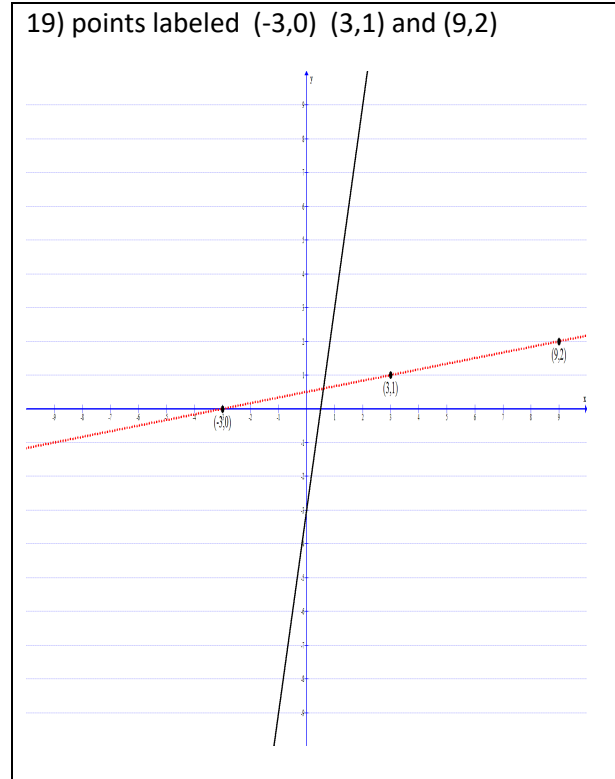


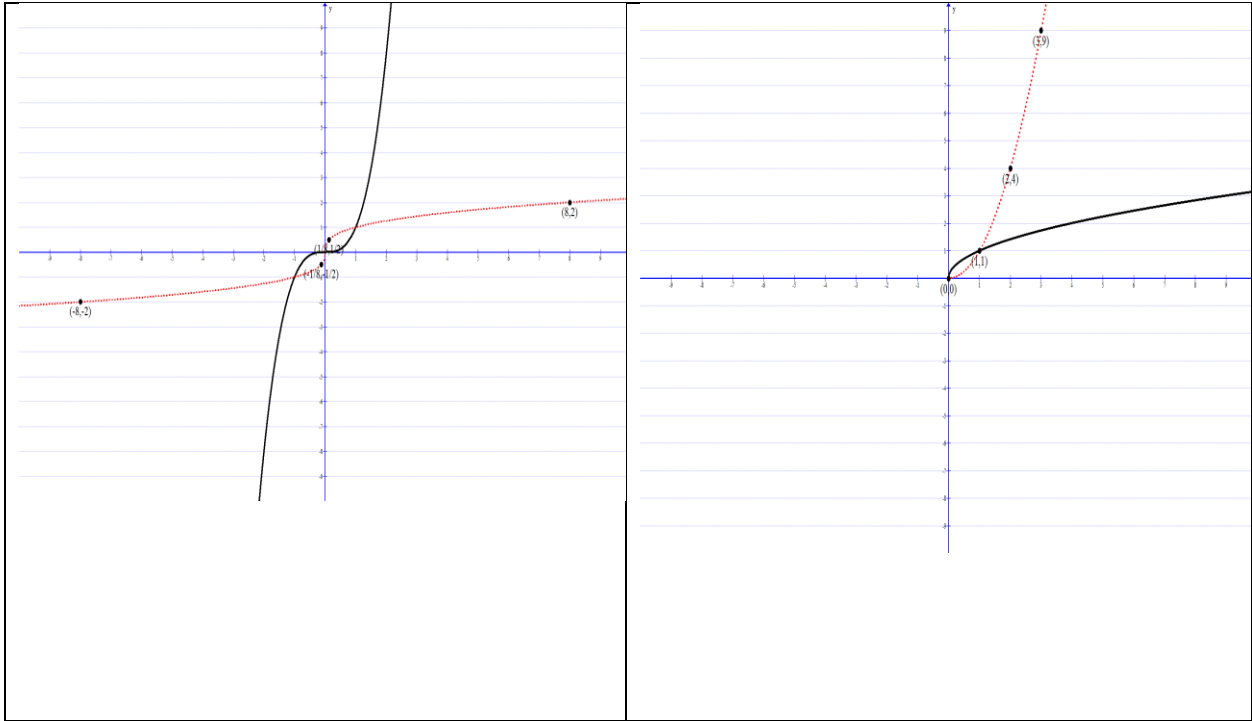
Section 6.2 answers

- 1) not one to one 3) one to one 5) one to one 7) not one to one
 9) not one to one 11) one to one 13) not one to one
 15) is one to one, $h^{-1} = \{ (3,0) (1,5) (11,7) (-3,9) \}$
 17) is one to one $m^{-1} = \{ (2,0) (3,2) (5,3) \}$



23)
 The new graph should have points
 $(1/8, 1/2)$ $(-1/8, -1/2)$ $(8,2)$ $(-8,-2)$

25) . The new graph should have points $(0,0)$
 $(2,4)$ $(1,1)$ $(3,9)$

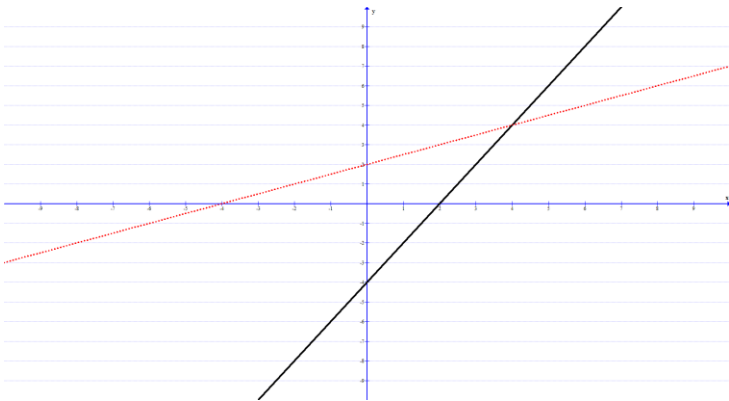


27a) $f^{-1}(x) = \frac{x+4}{2}$

27b)

$(f \circ f^{-1})(x) = f(f^{-1}(x))$	$(f^{-1} \circ f)(x) = f^{-1}(f(x))$
$(f \circ f^{-1})(x) = 2(f^{-1}(x)) - 4$	$(f^{-1} \circ f)(x) = \frac{f(x)+4}{2}$
$(f \circ f^{-1})(x) = 2\left(\frac{x+4}{2}\right) - 4 = x+4-4 = x$	$(f^{-1} \circ f)(x) = \frac{2x-4+4}{2} = \frac{2x}{2} = x$

27c) inverse drawn with dashed line

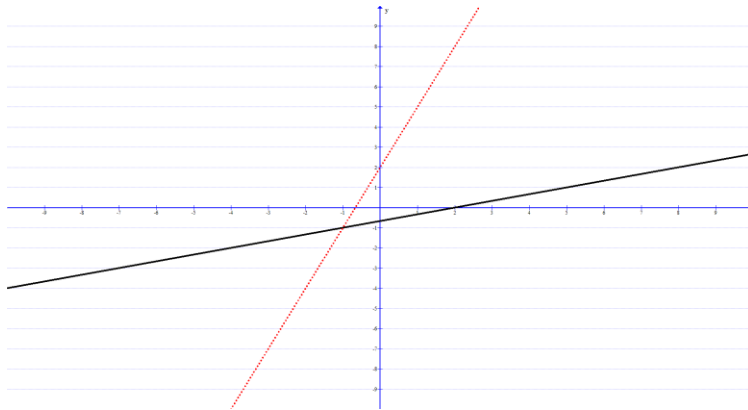


29a) $f^{-1}(x) = 3x+2$

29b)

$(f \circ f^{-1})(x) = f(f^{-1}(x))$	$(f^{-1} \circ f)(x) = f^{-1}(f(x))$
$(f \circ f^{-1})(x) = \frac{f^{-1}(x)-2}{3}$	$(f^{-1} \circ f)(x) = 3(f(x)) + 2$
$(f \circ f^{-1})(x) = \frac{3x+2-2}{3} = \frac{3x}{3} = x$	$(f^{-1} \circ f)(x) = 3 \frac{x-2}{3} + 2 = x-2+2 = x$

29c) inverse drawn with dashed line

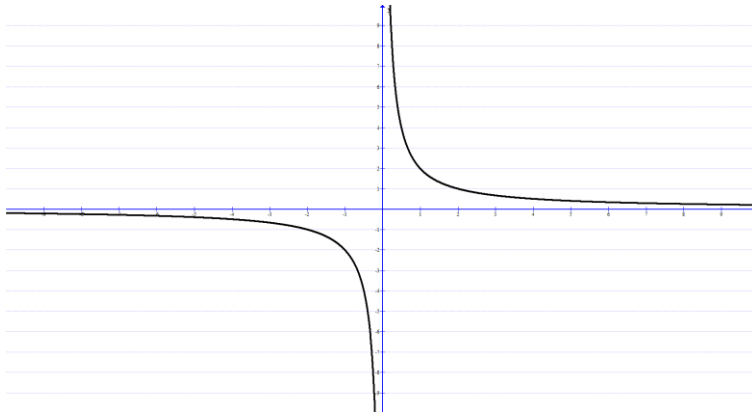


31a) $f^{-1}(x) = \frac{2}{x}$

31b)

$(f \circ f^{-1})(x) = f(f^{-1}(x))$	$(f^{-1} \circ f)(x) = f^{-1}(f(x))$
$(f \circ f^{-1})(x) = \frac{2}{f^{-1}(x)}$	$(f^{-1} \circ f)(x) = \frac{2}{f(x)}$
$(f \circ f^{-1})(x) = \frac{2}{\frac{2}{x}} = 2 * \frac{x}{2} = x$	$(f^{-1} \circ f)(x) = \frac{2}{\frac{2}{x}} = 2 * \frac{x}{2} = x$

31c) only one graph shown as the function is its own inverse.

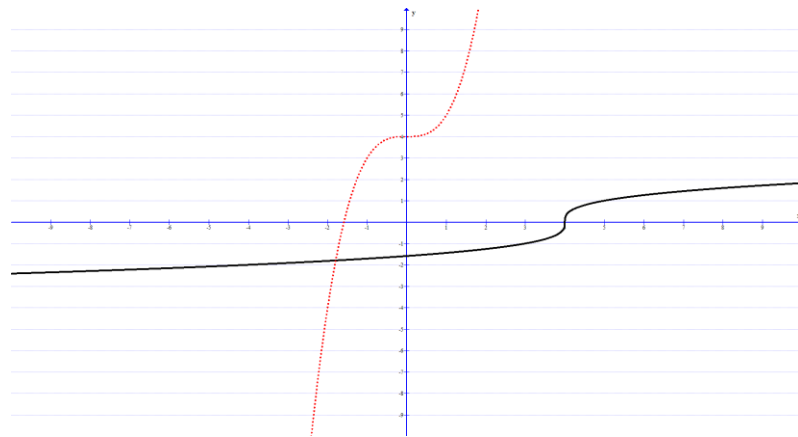


33a) $f^{-1}(x) = x^3 + 4$

33b)

$(f \circ f^{-1})(x) = f(f^{-1}(x))$	$(f^{-1} \circ f)(x) = f^{-1}(f(x))$
$(f \circ f^{-1})(x) = \sqrt[3]{f^{-1}(x) - 4}$	$(f^{-1} \circ f)(x) = (f(x))^3 + 4$
$(f \circ f^{-1})(x) = \sqrt[3]{x^3 + 4 - 4} = \sqrt[3]{x^3} = x$	$(f^{-1} \circ f)(x) = \sqrt[3]{x - 4}^3 + 4 = x - 4 + 4 = x$

33c)



35a) $f^{-1}(x) = \sqrt[3]{x-2}$

35b)

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

35c)

