

HW 53

p244

13. $x = (\sqrt[3]{y})^3$

$$x^3 = y$$

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

400

100.

- a) yes
 b) population to year
 c) 25
 d) no

14. $y = x^5$
 $(x)^{1/5} = (y^5)^{1/5}$

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

103. False, fails HLT

104. true

21. $f(g(x)) = (\sqrt[3]{x-5})^3 + 5 = x$

$$g(f(x)) = \sqrt[3]{x^3 + 5 - 5} = x$$

yes

35. no

36. yes

37.

x	-2	0	2	4	6	8
$f^{-1}(x)$	-2	-1	0	1	2	3

38.

x	-10	-7	-4	-1	2	5
$f^{-1}(x)$	-3	-2	-1	0	1	2

39. yes

40. no

41. no

42. yes