

51

a) translate f 5 units up

$$y = g(x) = f(x) + 5$$

b) transl. f 5 units down

$$y = g(x) = f(x) - 5$$

c) transl. 5 units right

$$y = g(x) = f(x-5)$$

d) transl. f 5 units left

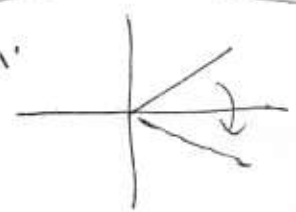
$$y = g(x) = f(x+5)$$

e)



$$y = g(x) = f(-x)$$

f)



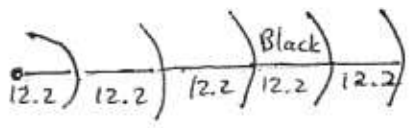
$$y = g(x) = -f(x)$$

52

- a) same
- b) same
- c) opposites
- d) same

53

$$\text{Prob Black} = \frac{\text{Area Black}}{\text{Area Total}}$$



$$\text{Area Black} = \pi(4(12.2))^2 - \pi(3(12.2))^2$$

$$\pi(48.8)^2 - \pi(36.6)^2$$

$$\text{Area Black} = 1041 \pi$$

$$\text{Area Total} = \pi(5 * 12.2)^2$$

$$A_{\text{total}} = \pi * 3721$$

$$\frac{\text{Area Black}}{\text{Area Total}} = \frac{1041}{3721} = .28$$

28%