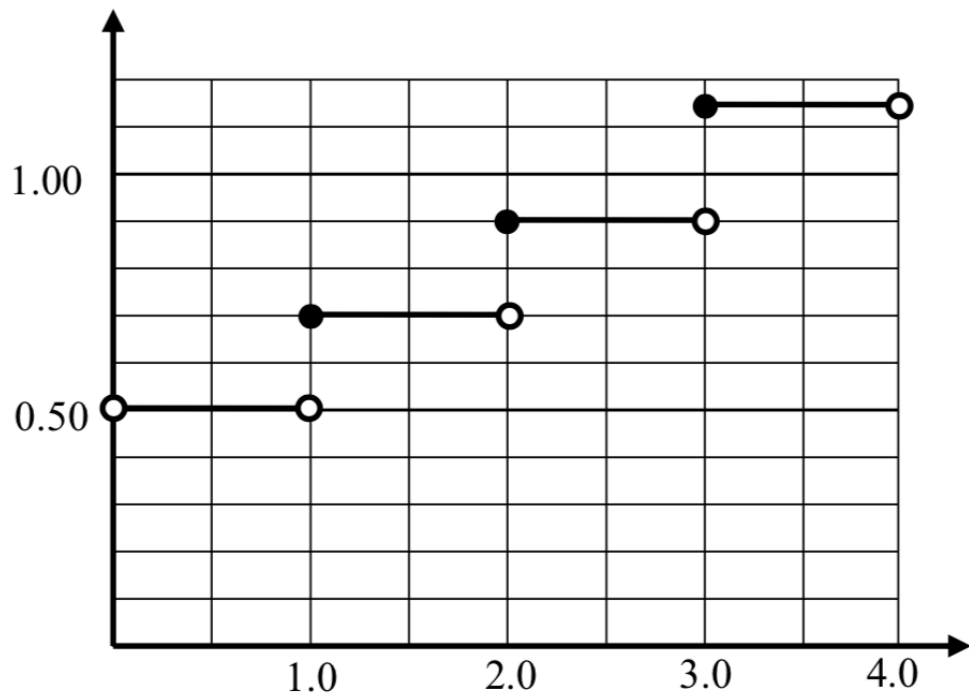


$b(x)$



$$g(x) = \begin{cases} 10 & 0 \leq x < 4 \\ 7 & 4 \leq x < 8 \\ 4 & 8 \leq x \leq 12 \end{cases}$$

$$h(x) = \begin{cases} 3x - 5, & x \leq 20 \\ 11 + 2x, & x > 20 \end{cases}$$

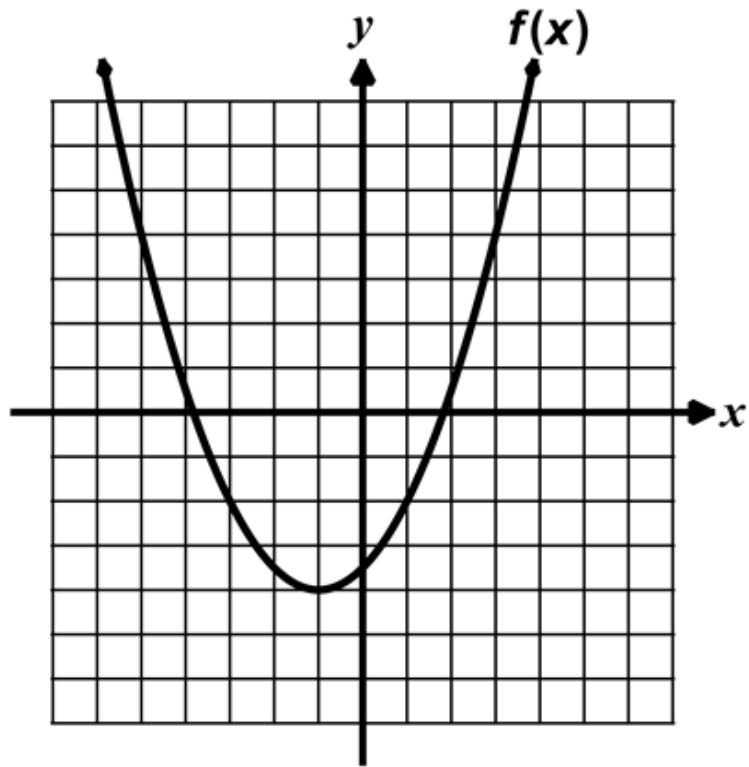
$x$	0	2	3	4	6	8	10
$k(x)$	-3	4	11	24	36	43	46

$$a(x) = \{(-3, 2), (5, 0), (0, 1), (3, -4), (2, -1), (-2, 6), (6, 36)\}$$

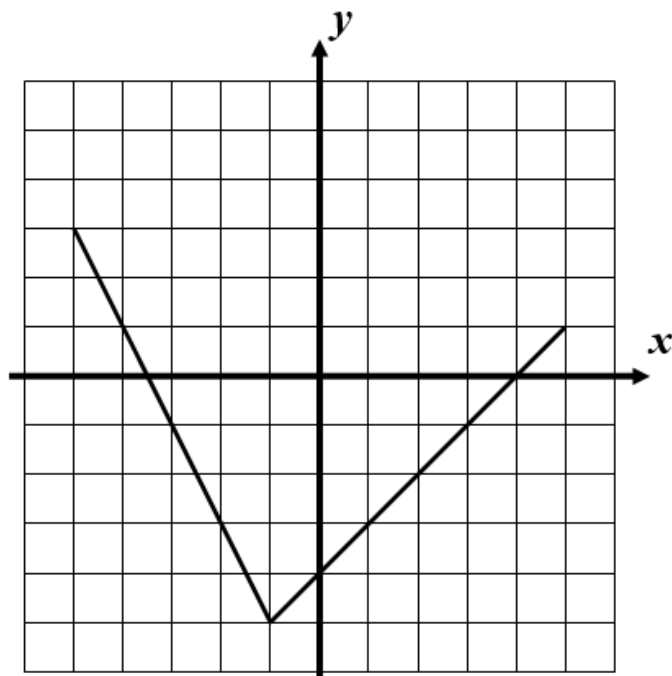
$$r(x) = 3|2 - x|$$

$$q(x) = \sqrt{x - 6}$$

$$p(x) = \frac{1}{2}x^2 + 5$$



$$c(x)$$



Name: \_\_\_\_\_

Class: \_\_\_\_\_

Function	Maximum	Minimum	Domain	Range	y-Intercept	x-Intercept (Zeros)
$a(x)$						
$b(x)$						
$c(x)$						
$f(x)$						
$g(x)$						
$h(x)$						
$k(x)$						
$p(x)$						
$q(x)$						
$r(x)$						

Question 1If  $Z(x) = 2b(x) - g(x)$ , find the value of  $Z(1)$

Question 2

Let  $W(x) = \frac{1}{2}h(x) - q(x) + r(x)$ . Find the value of  $W(42)$

Question 3

Let  $Y(x) = \frac{f(x) - |f(x)|}{a(4-x)}$ . Find the value of  $Y(c(5))$

Question 4

Find as many solutions to  $\_\_(x) = \_\_\_(x)$  as you can.

Question 5

Create your own function combination question.

Question 6

Create your own function combination question.