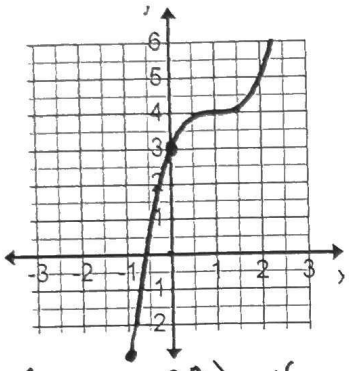
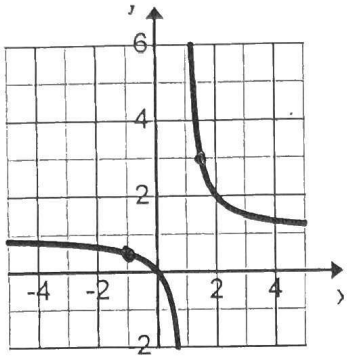
16 & 17 For the each function evaluate $f(0)$, $f(\frac{3}{2})$, and $f(-1)$.

16.



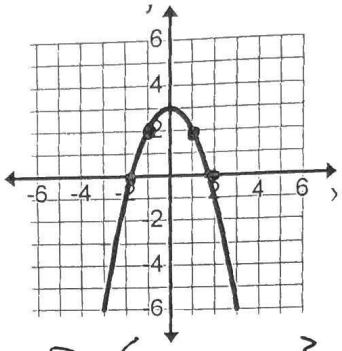
$f(0)=3$ $f(3/2)=4$ $f(-1)=-3$

17.



$f(0)=0$ $f(3/2)=3$ $f(-1)=1/2$

18. Evaluate for the replacement set {-2, -1, 1, 2}



R: {0, 2 }

19. Identify the independent and dependent variable, then state a reasonable domain.

As long as a minimum of 15 shirts are ordered, the cost for an order of T-shirts is $4.25 per shirt.

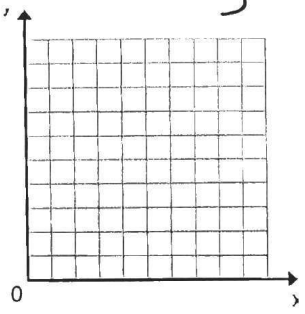
Independent: #of Shirts

Dependent: Cost

Domain: $x \geq 15$ $ Z

20. Write a function to represent the price for a tank of gasoline is $2.37 per gallon and **graph** the function.

$P(g) =$ 2.37g



21. In a certain county, the fines for speeding in a school zone is $160 plus an additional $4 for every mile per hour over the speed limit. Write a function to represent the speeding fines. What is the value of the function for an input of 8, and what does it represent?

$f(x) = 4x + 160$

$4(8) + 160$

$32 + 160 = 192$

Part II

Given $f(x)=2x+3$, $g(x)=-3x^2$, and $h(x)=\frac{x}{4}$, find each function.

1. Find f(2)

$2(2)+3$

$4+3=7$

2. Find g(5)

$-3(5)^2$

-75

3. Find h(-2)

$\frac{-2}{4} = -1/2$

4. Find f(10)

$2(10)+3$

23

5. Find g(-4)

$-3(-4)^2$

-48

6. Find h(-24)

$\frac{-24}{4} = -6$