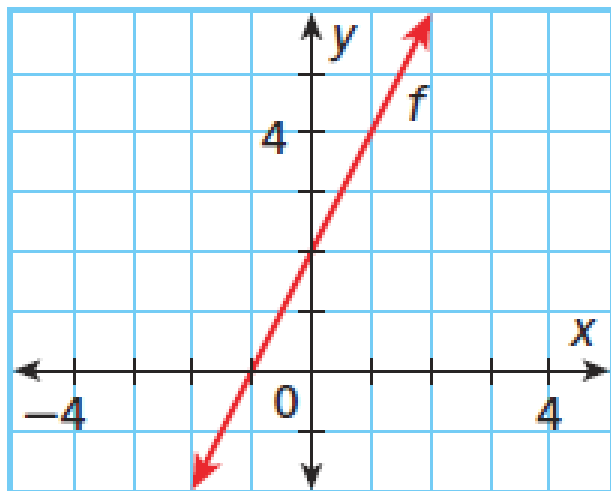


**Assignment:**

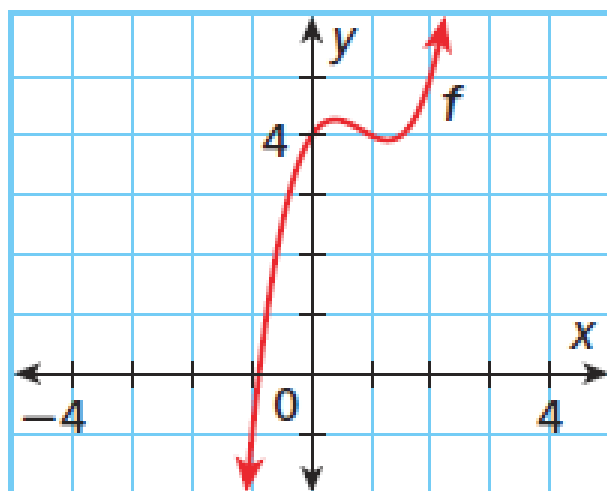
**Page 54 # 15 – 17, 29 – 32, 43 – 48**

For each function, evaluate  $f(0)$ ,  $f\left(\frac{3}{2}\right)$ , and  $f(-1)$ .

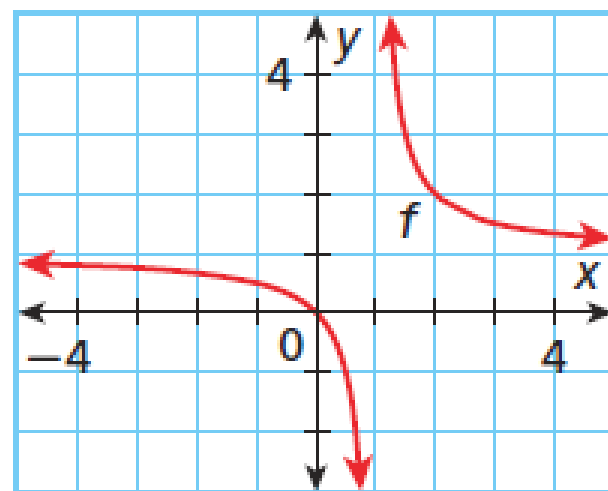
15.



16.



17.



**Explain what a reasonable domain and range would be for each situation.**

- 29.** the number of boxes of kitchen tile that must be purchased to cover a floor with an area of  $A$  square feet
- 30.** the number of horseshoes needed to shoe  $h$  horses
- 31.** the vertical position of a diver in relation to the surface of the pool  $t$  seconds after diving from a 10-meter platform into a 16-foot-deep pool (*Hint:* 1 meter  $\approx$  3.28 feet)
- 32.** the temperature in degrees Fahrenheit at an Antarctic research station  $h$  hours after 12:00 A.M.

**Identify the independent and dependent variable for each situation. Then state a reasonable domain.**

- 43.** As long as a minimum of 15 shirts are ordered, the cost for an order of T-shirts is \$4.25 per shirt.
- 44.** Belinda's medical insurance states that she must pay the first \$500 for a hospital stay plus 15% of the remaining charges.

**Write a function to represent each situation. Graph your function.**

- 45.** The price for a tank of gasoline is \$2.37 per gallon.
- 46.** Raul earns \$7.50 per hour for baby-sitting.
- 47.** The sale price is 20% off of the original price.
- 48.** Leona's weekly salary is \$250 plus 5% of her total sales for the week.