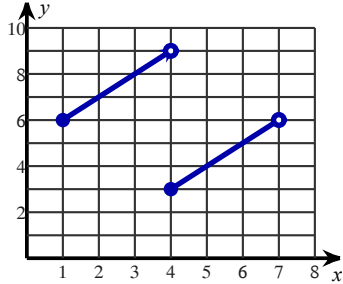


Piecewise Functions

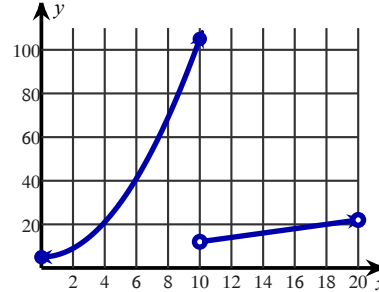
1) $f(x) = \begin{cases} x + 5, & 1 \leq x < 4 \\ x - 1, & 4 \leq x < 7 \end{cases}$

$f(1) =$ $f(3) =$ $f(6) =$



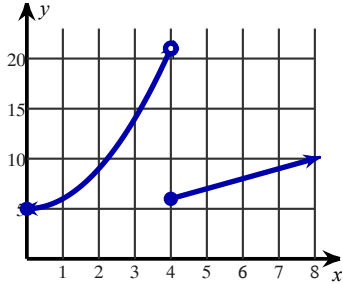
2) $f(x) = \begin{cases} x^2 + 5, & 0 \leq x \leq 10 \\ x + 2, & 10 < x < 20 \end{cases}$

$f(2) =$ $f(10) =$ $f(16) =$



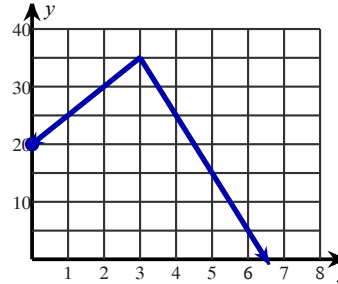
3) $f(x) = \begin{cases} x^2 + 5, & 0 \leq x < 4 \\ x + 2, & 4 \leq x \end{cases}$

$f(2) =$ $f(4) =$ $f(32) =$



4) $f(x) =$

$f(2) =$ $f(6) =$ $f(8) =$



5) $f(x) = \begin{cases} x^2 + 3, & 0 \leq x \leq 10 \\ x + 4, & 10 < x < 20 \\ 2x + 1, & 20 \leq x < 30 \end{cases}$

$f(22) =$ $f(8) =$ $f(19) =$

6) $f(x) = \begin{cases} 3, & 0 \leq x \leq 10 \\ x + 4, & 10 < x < 20 \\ 50, & 20 \leq x < 30 \end{cases}$

$f(22) =$ $f(8) =$ $f(20) =$

7) $f(x) = \begin{cases} x^3, & x \leq 10 \\ x + 4, & x > 10 \end{cases}$

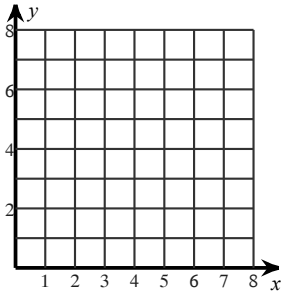
$f(22) =$ $f(8) =$ $f(10) =$

8) $f(x) = \begin{cases} \frac{3}{x^2}, & x \leq 10 \\ |2x - 100|, & x > 10 \end{cases}$

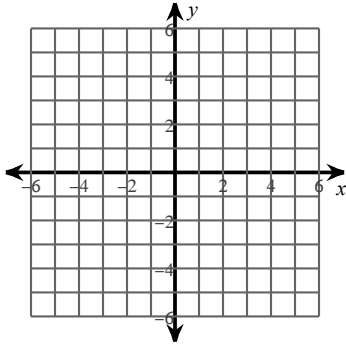
$f(30) =$ $f(9) =$ $f(10) =$

- 9) A car wash costs \$3.00 to start and lasts for four minutes. After that, your credit card is charged continuously at a rate of one dollar per minute.

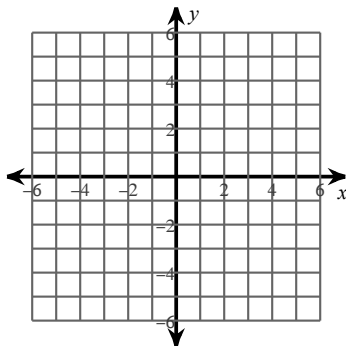
$$f(x) =$$



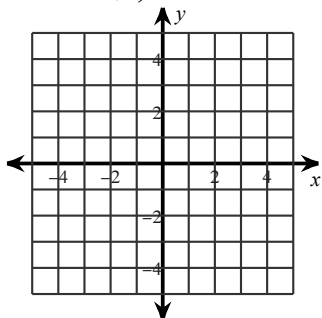
$$11) f(x) = \begin{cases} x + 2, & x \leq 0 \\ x^2 - 3, & x > 0 \end{cases}$$



$$13) f(x) = \begin{cases} \frac{1}{2}x + 3, & x \leq 2 \\ \frac{1}{2}x - 3, & x > 2 \end{cases}$$



$$15) f(x) = \begin{cases} 5, & x \leq -1 \\ -3, & 0 < x \leq 2 \\ 1, & x > 4 \end{cases}$$



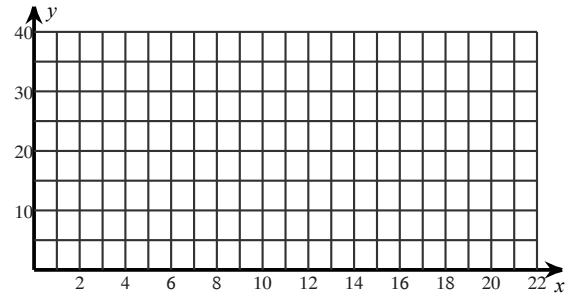
- 10) Haunted House Prices

Kids under 5: free

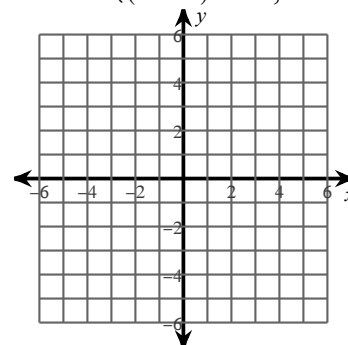
Kids ages 5-12: \$10 $f(x) =$

Teens 13-18: \$15

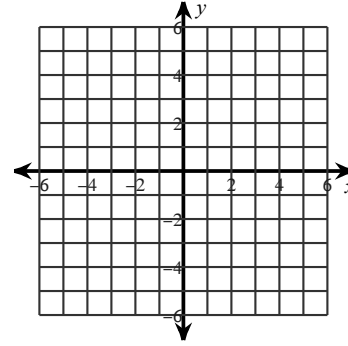
Adults: \$35



$$12) f(x) = \begin{cases} x, & x \leq -2 \\ (x + 1)^2 - 5, & x > -2 \end{cases}$$



$$14) f(x) = \begin{cases} (x + 2)^2, & x \leq 0 \\ (x - 2)^2, & 0 < x \leq 3 \\ 1, & x > 3 \end{cases}$$



$$16) f(x) = \begin{cases} (x + 6)(x + 2), & x \leq -2 \\ -x - 2, & x > -2 \end{cases}$$

