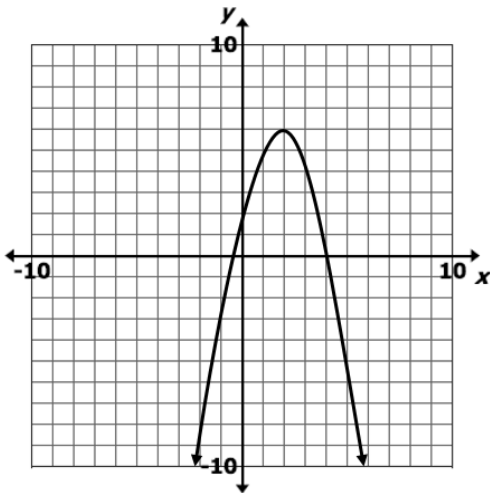




Paper-and-pencil assessments will contain multiple choice and multiple select items. Online assessments will also contain technology-enhanced items.

Multiple Choice

1. Consider the graph of a function, $f(x)$, and the table containing certain values of another function $g(x)$ for different values of x .



x	$g(x)$
-1	4
0	7
1	8
2	7
3	4

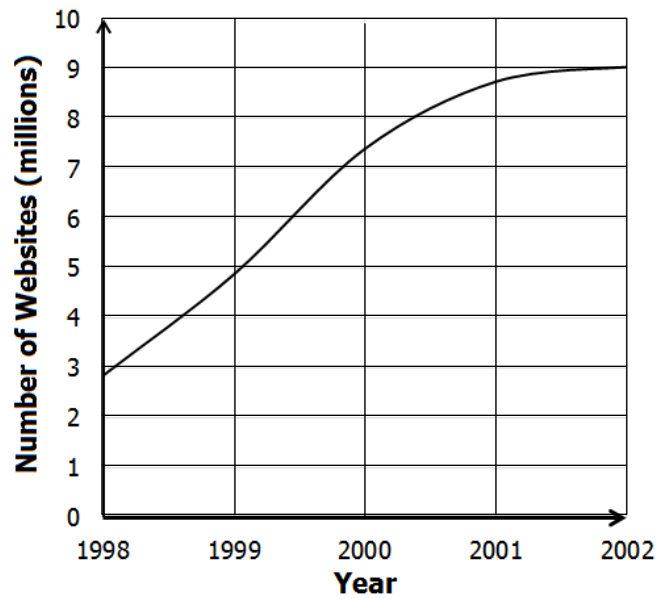
Which statement is true?

- A $f(x)$ has a greater average rate of change than $g(x)$ over the interval $0 \leq x \leq 1$.
 - B $g(3)$ is greater than $f(3)$.
 - C The maximum value of $f(x)$ is greater than the maximum value of $g(x)$.
 - D The y -intercept of $f(x)$ is greater than the y -intercept of $g(x)$.
2. A shoe company usually sells an average of 100 pairs of shoes per week for a price of \$75 per pair. For every \$5 increase in the price per pair, the company sells 10 less pairs of shoes.

If the company earns \$8,000 in one week, and x represents the number of \$5 increases in price, which equation models the situation?

- A $(75 - 5x)(100 - 10x) = 8,000$
- B $(75 - 5x)(100 + 10x) = 8,000$
- C $(75 + 5x)(100 - 10x) = 8,000$
- D $(75 + 5x)(100 + 10x) = 8,000$

3. The graph shows the number of websites, in millions, for a five-year time span.



What is the *approximate* average rate of change of the number of websites from 1999 to 2002?

- A 1.2 million sites per year
- B 1.4 million sites per year
- C 4.8 million sites per year
- D 6.1 million sites per year

Multiple Select

4. Which two equations, when solved for x , include an extraneous solution?

- A $2 = \sqrt{x}$
- B $\frac{x-5}{x+4} = \frac{1}{x+4}$
- C $\frac{1}{x} = 4$
- D $x - 6 = \sqrt{x}$
- E $\frac{2}{x-2} = \frac{x}{x-2}$