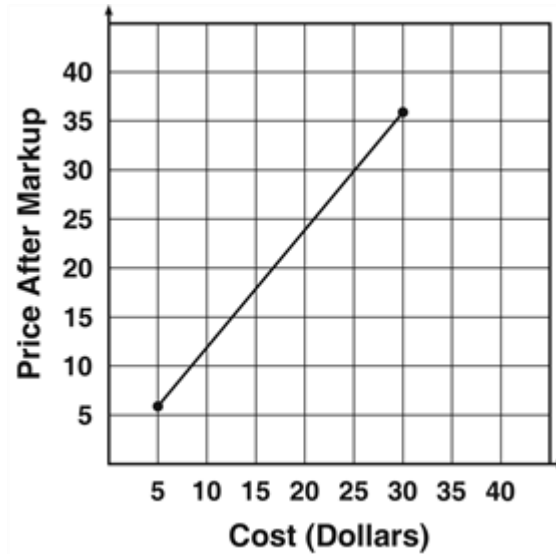**1.** The graph below models the price of items after 120% markup at a small shop.

Based only on the given graph, what is the function's domain?

A   numbers between and including 0 and 30

B   numbers between and including 0 and 36

C   numbers between and including 5 and 30

D   numbers between and including 6 and 36

2. What is the range of the function $y = 2x + 3$ for the domain $2 \leq x \leq 5$?

A $-\frac{1}{2} \leq y \leq 1$ **C** $4 \leq y \leq 10$

B $1 \leq y \leq \frac{5}{2}$ **D** $7 \leq y \leq 13$

3. For the function $f(x) = 5x - 3$, what is the range of $f(x)$ for the domain {2, 7, 12}?

A $R = \{1, 2, 3\}$ **C** $R = \{7, 32, 57\}$

B $R = \{5, 10, 15\}$ **D** $R = \{10, 35, 60\}$

4. What is the range of $f(x) = 8 - \sqrt{\frac{x}{3}}$?
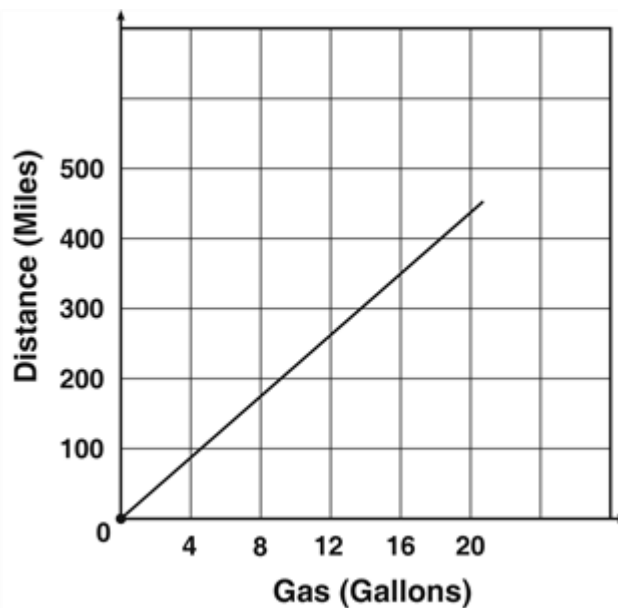
A $f(x) \leq 8$

C $f(x) \geq 0$

B $f(x) \geq 8$

D $f(x) \leq 8 - \sqrt{\frac{8}{3}}$

5. The following graph shows the functional relationship between the distance a car travels and the amount of gas it consumes. The car is able to travel 22 miles per gallon of gas.

If the maximum amount the gas tank can hold is 19 gallons, what is the range of this function with a full tank of gas?

A   The range is less than 19.

B   The range is less than 418.

C   The range is between 0 and 19 inclusive.

D   The range is between 0 and 418 inclusive.

6. The function $A = w(w + 8)$ models the area of a rectangle with a width of w and a length of $w + 8$. What is an appropriate domain for this function?

A $A > 0$

C $-8 < w < 0$

B $w > 0$

D   all real numbers