Quiz 3

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Question 1 Which function below describes the square root function flipped over the x-axis and shifted upwards by 3?

A
$$y = \sqrt{x-3}$$

$$\mathbf{B} \ y = \sqrt{x} + \sqrt{3}$$

C
$$y = 3 - \sqrt{x}$$

$$\mathbf{D} \ y^2 = x^2 + 3$$

Question 2 Choose the function whose range is all real numbers:

A
$$y = x^3$$

$$\mathbf{B} \ y = |x|$$

$$\mathbf{C} \ ty = x^2 - x$$

$$\mathbf{D} \ y = \left\{ \begin{array}{ll} x & & x > 0 \\ \\ 0 & & x \le 0 \end{array} \right.$$

Question 3 The function f(x) = 2x + 3 is a _____ function.

- A Piecewise.
- B Linear.
- C Constant.
- ${\bf D} \ trigonometric.$

Question 4 Choose the domain of the function $\frac{1}{3x-2}$.

- **A** All real numbers except for $\frac{3}{2}$.
- **B** All real numbers.
- C All real numbers except for $\frac{2}{3}$.
- **D** All non-negative real numbers.