December Examination 2020

1. Identify the functions that are one to one. Respond yes or no

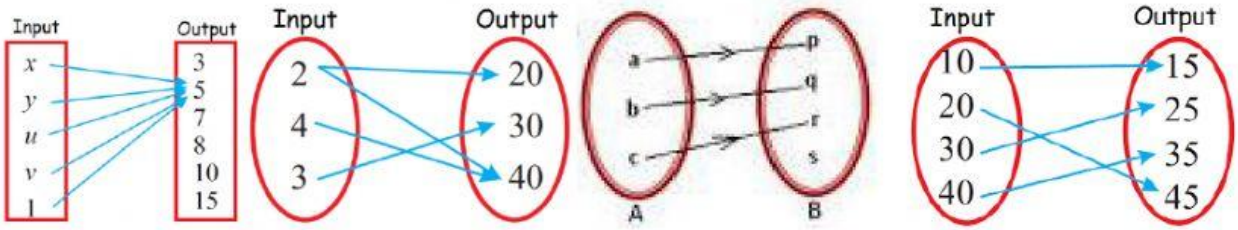
a) $f(x) = x + 4$ b) $f(x) = 2x$ c) $f(x) = \frac{4}{x+7}$

d) $f(x) = \frac{x+4}{x-3}$ e) $f(x) = -\frac{5}{x^2}$ f) $f(x) = x^4 - 1$

g) $f(x) = (x-2)^2 + 1$ h) $f(x) = \sqrt{x}$ i) j) $f(x) = \sqrt{2x+3}$

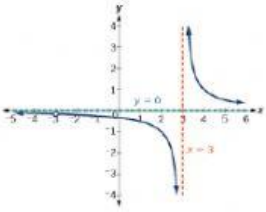
l) $f(x) = 5$ m) $f(x) = x^2 - 2x + 2$ n) $f(x) = 3x^2 - 6x + 1$

2. Drag and drop the correct type of function as indicated on the arrow diagrams

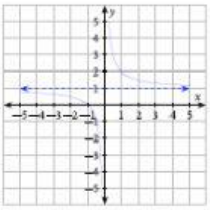


Surjective General Function Bijective Injective

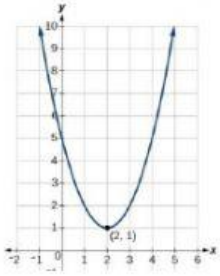
3. Match each graph to its possible function.



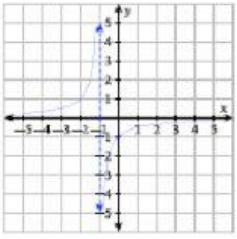
$g(x) = (x-2)^2 + 1$



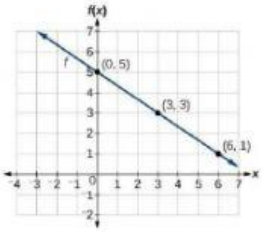
$h(x) = -\frac{7}{x}$



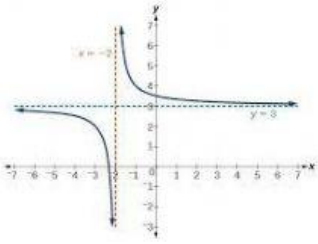
$3y = 15 - 2x$



$y = \frac{3}{x-3}$



$y = \frac{3}{x+2} + 3$



$p(x) = \frac{5}{x} + 1$