

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) $f(x) = \sqrt{x}$

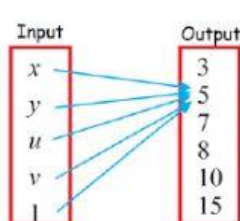
i) j) $f(x) = \sqrt{2x+3}$

l) $f(x) = 5$

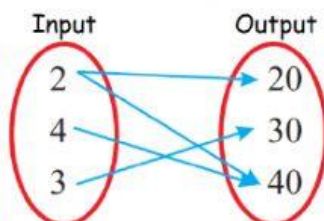
m) $f(x) = x^2 - 2x + 2$

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

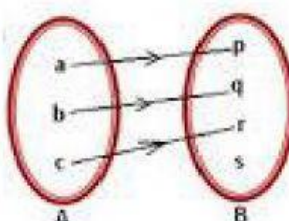
2. Drag and drop the correct type of function as indicated on the arrow diagrams



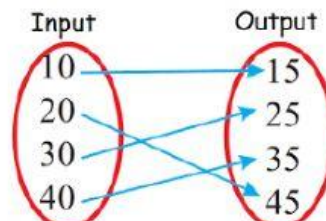
Surjective



General Function

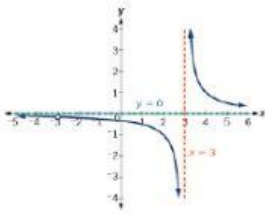


Bijjective

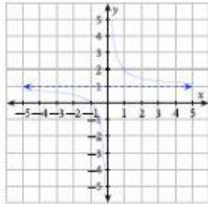


Injective

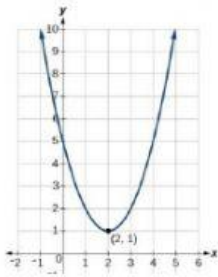
3. Match each graph to its possible function.



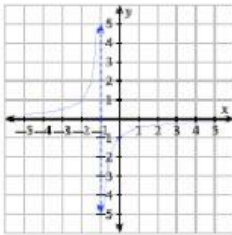
$$g(x) = (x - 2)^2 + 1$$



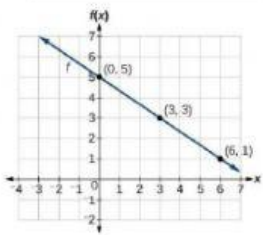
$$h(x) = -\frac{7}{x}$$



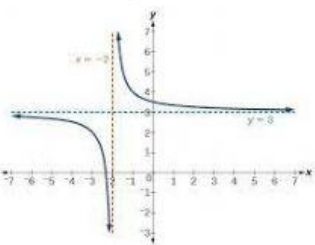
$$3y = 15 - 2x$$



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



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



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