Functions (Part 2): Domain and Range

First & Last Name: _____ **Class:** _____

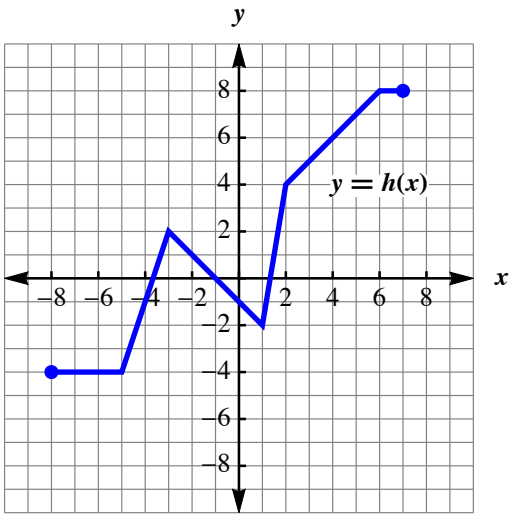
If you did not get full points on the *Functions* section of the "Pre-Review" test, attempt all of the (non-challenge) questions on this handout. Check your answers using the answer key. If you did not get a correct answer, use Khan Academy to review and master the topic.
Honor Students: you are expected to master the challenge questions.

Section 1: Domain and range from a graph (KA link)

1. State, in interval notation,

a. The domain of h.

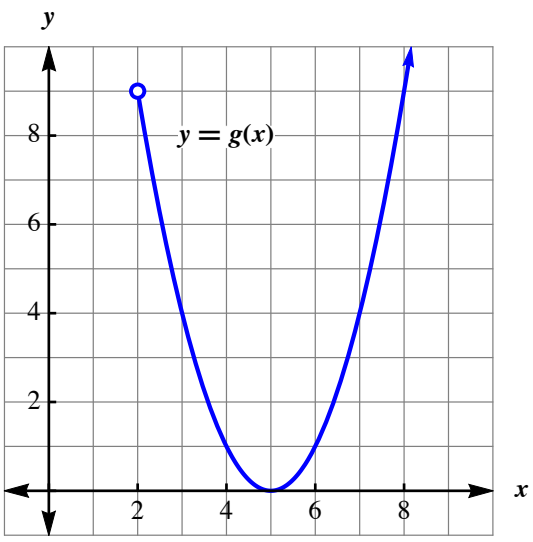
b. The range of h.



2. [Challenge] State, in interval notation,

a. The domain of g.

b. The range of g.



Section 2: Determine the domain of functions (KA link)

1. State the domain of the following functions using interval notation:

a. $f(t) = 6t - 5$

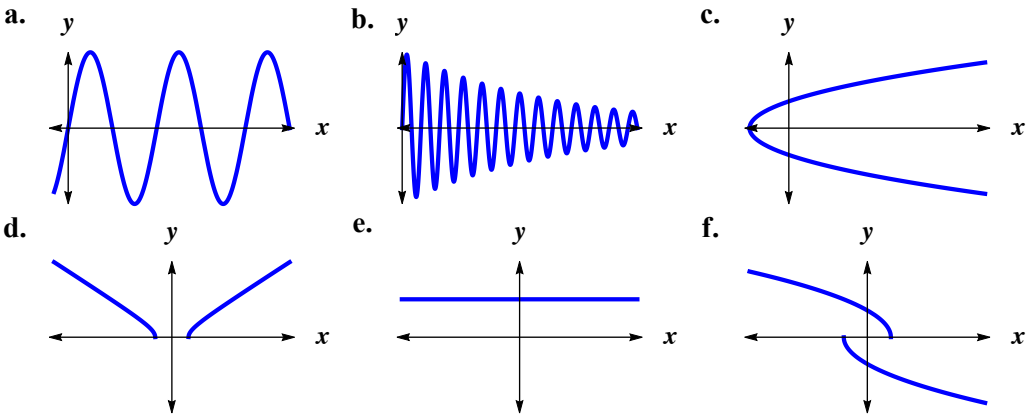
b. $g(x) = \sqrt{15 - 4x}$

c. $h(r) = \frac{r^2 - 4}{r + 3}$

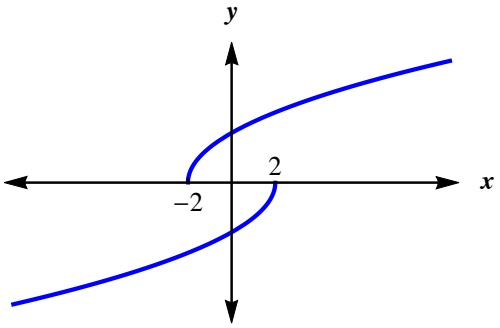
2. [Challenge] State the domain of the following functions using interval notation:
   a. $f(x) = mx + b$
   b. $g(x) = \sqrt{x^2 - 4}$

Section 3: Recognize functions from graphs (KA link)

1. Which of the following graphs represent a function?



2. [Challenge] Restrict the domain of the following graph so that it represents a function (write the domain using interval notation).



Section 4: Recognize functions from tables (KA link)

1. Make as few changes as possible to the table below so the weight of person (in lbs) is a function of their height (in inches).

Height	Weight
60	105
72	180
58	110
74	180
59	103
58	112
72	180
67	159