DOMAIN

ALL REAL NUMBERS EXCEPT:

1. ONES THAT CAUSE A ZERO IN THE DENOMINATOR

#1 $f(x) = -2x - 5$

$(-\infty, \infty)$

#2 $H(x) = \frac{x-7}{3x-1}$

① SET DENOM. EQUAL TO ZERO AND SOLVE

$3x - 1 = 0$

$3x = 1$

$x = \frac{1}{3}$

② PUT SLASH THRU EQUALS

$x \neq \frac{1}{3}$

$(-\infty, \frac{1}{3}) \cup (\frac{1}{3}, \infty)$

#3 $H(x) = |x-2|$

#4

a) D: $(-\infty, \infty)$

R: $(-\infty, \infty)$

b) X-INT: 4 or (4,0)

y-INT: 2 or (0,2)

c) ZEROS: WHERE THE GRAPH TOUCHES X-AXIS

4

#5

a) D: $(-\infty, \infty)$

R: $(-\infty, 9]$

b) X-INT: $-2, 4$

y-INT: 8

c) ZEROS: $-2, 4$

#6

a) D: $(-\infty, 4]$

R: $(-\infty, 7]$

b) X-INT: $-2, 4$

y-INT: 7

c) ZEROS: $-2, 4$

#7 a) $f(-6) =$ ____

$x = -6$ $y = ?$