Math 151 - Quiz 9

November 4, 2015

Name key

Score _____

Show all work. Supply explanations when necessary.

1. (7 points) Solve the following inequality. Write your answer in interval notation.

$$\frac{x-4}{(x-2)(x+1)} \geq 0$$

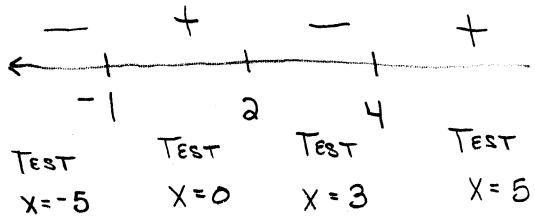
DOMAIN EXCLUDED PTS:

$x = 2,\ x = -1$

ZEROS:

$x = 4$

SIGNS OF LHS



LHS ≥ 0 ON

$(-1, 2) \cup [4, \infty)$

CANNOT INCLUDED DOMAIN EXCLUDED PTS

INCLUDE ZERO

2. (3 points) Make a table of values showing four points on the graph of $f(x) = 3^x$. Then sketch the graph of f.

x	$f(x)$
-1	$\frac{1}{3}$
0	1
1	3
2	9