

(6 points) d) With  $R(x) = \frac{7x-3}{x^2-4}$ , use a t-chart (or the appropriate equivalent) to answer the following questions. What values of x make  $R(x) > 0$  and what values make  $R(x) < 0$ ?

x	R(x)
-3	$\frac{-24}{5}$
-2	DNE
0	$\frac{3}{4}$
$\frac{3}{7}$	0
1	$\frac{4}{-3}$
2	DNE
3	$\frac{18}{5}$

$R(x) > 0$ :

x in  $(-\infty, \frac{3}{7}) \cup (2, \infty)$

$R(x) < 0$

$(-\infty, -2) \cup (\frac{3}{7}, 2)$

(6 points) e) Graph  $R(x)$ .

