

Name _____

PCH Worksheet #1 Unit #1
Fractional Inequalities

SOLVE for all values of x . Show all work and write your solution in interval notation.

1. $\frac{1}{x} > 3$

2. $\frac{1}{x-2} \leq 5$

3. $\frac{2x-3}{x} < 5$

4. $\frac{6}{x+1} - \frac{2}{x} > 1$

5. $x - 6 \leq \frac{-10}{x+1}$

(OVER)

6. $\frac{4}{x+2} - \frac{1}{x-1} > 0$

7. $\frac{3}{x+4} + \frac{12}{x-5} \leq -1$

8. In each of the following write an equivalent form without the absolute value symbol.

a) $|-13|$

b) $|2^{-1}|$

c) $|8-2|$

d) $|(-4-6)/2|$

e) $\left| 3\left(\frac{-5}{3}\right) \right|$

f) $|2-7| - |7-2|$

g) $|x| < 3$

h) $|x| < 10$

i) $|2-\sqrt{5}|$

j) $|\sqrt{5}-2|$