Name _____ Date _____

Directions: Solve each rational inequality. Cross out the answer in the table below. The remaining letters will spell out the answer to this riddle.

If two's company and three's a crowd, what are four and five?

N $(-\infty,-3)$	O $(-6,-1)$	M $(-\infty,-1]\cup(3,\infty)$	I $(0,3)$	E $\left(-2,\frac{3}{2}\right]$	L $\left(-\infty,-5\right)$	P $(-2,0]$
H $(-5,-4)$	N $\left(-\infty,-3\right)\cup[2,\infty)$	A $[2,\infty)$	E $(-\infty,-3)$	T $\left(-\infty,-2\right)\cup(4,\infty)$	S $(-2,3]$	Y $[-3,-1)\cup[3,\infty)$

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

2. $\frac{x+12}{x+2}\geq 3$

3. $\frac{2}{x+4}<-2$

4. $\frac{2}{x+5}\leq 0$

5. $\frac{5x}{x+2} \leq 0$

6. $\frac{4}{x-3} \geq -1$

7. $\frac{7}{x+2} \geq 2$

8. $\frac{x^2-x-2}{x+1} \geq 0$

9. $\frac{x^2-9}{x+1} \geq 0$

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