$\qquad$ Date $\qquad$

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?

| $\begin{gathered} \mathrm{N} \\ (-\infty,-3) \end{gathered}$ | $\begin{gathered} \bigcirc \\ (-6,-1) \end{gathered}$ | $\begin{gathered} M \\ (-\infty,-1] \cup(3, \infty) \end{gathered}$ | $\begin{gathered} \text { । } \\ (0,3) \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ \left(-2, \frac{3}{2}\right] \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ (-\infty,-5) \end{gathered}$ | $\begin{gathered} \mathrm{P} \\ (-2,0] \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} \mathrm{H} \\ (-5,-4) \end{gathered}$ | $\begin{gathered} \mathrm{N} \\ (-\infty,-3) \cup[2, \infty) \end{gathered}$ | $\begin{gathered} \mathrm{A} \\ {[2, \infty)} \end{gathered}$ | $\begin{gathered} \mathrm{E} \\ (-\infty,-3) \end{gathered}$ | $\begin{gathered} \mathrm{T} \\ (-\infty,-2) \cup(4, \infty) \end{gathered}$ | $\begin{gathered} \mathrm{S} \\ (-2,3] \end{gathered}$ | $\begin{gathered} \mathrm{Y} \\ {[-3,-1) \cup[3, \infty)} \end{gathered}$ |

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. $\frac{5 x}{x+2} \leq 0$
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. $\frac{5}{x+6}>1$
