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Graphs - Systems
Graph two lines for every grid.

| 1 | $\begin{aligned} & y=-x-2 \\ & y=-x+3 \end{aligned}$ | 2 | $\begin{gathered} y=x+3 \\ y=-x+5 \end{gathered}$ | 3 | $\begin{gathered} y=3 x \\ y=3 x-6 \end{gathered}$ | 44 | $\begin{gathered} y=2 x+1 \\ y=\frac{1}{2} x+6 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | - | $7!$ |
| 5 | $\begin{aligned} & y=\frac{4}{3} x-1 \\ & y=\frac{4}{3} x+10 \end{aligned}$ | 6 | $\begin{aligned} & y=\frac{2}{5} x+7 \\ & y=-\frac{5}{2} x-8 \end{aligned}$ | 7 | $\begin{gathered} y=-\frac{3}{2} x-4 \\ y=\frac{1}{2} x \end{gathered}$ | 3 | $\begin{gathered} y=-\frac{1}{4} x-8 \\ y=4 x+8 \end{gathered}$ |
|  |  |  |  |  |  |  |  |
| 3 | $\begin{aligned} & y=\frac{1}{3} x-4 \\ & y=3 x+4 \end{aligned}$ | 10 | $\begin{aligned} & y=-\frac{2}{3} x+5 \\ & y=\frac{3}{2} x-8 \end{aligned}$ | 11 | $\begin{aligned} & y=-\frac{1}{5} x+6 \\ & y=-\frac{1}{5} x-3 \end{aligned}$ | 12 | $\begin{aligned} y & =-\frac{3}{4} x+7 \\ y & =\frac{4}{3} x+1 \end{aligned}$ |
|  |  |  |  |  |  |  |  |

13. Which graphs contain lines that are PARALEEL? What are PARALLEL lines?
14. Which graphs contain lines that are PERPENDICULAR? What are PERPENDICULAR lines?
15. Which graphs contain lines that are NOT PARALLEL or PERPENDICULAR?
16. Carefully examine the set of equations for each of your graphs. What is it about the EQUATIONS that make
a) the lines $\mathbf{P}$
PARALLEL to each other?
b) the lines PERPENDICULAR to each other?
