Algebra 1b- Mrs. Tilus Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Unit 6- Part 1 Review: Parallel/Perpendicular Lines and Systems of Equations

Are the line parallel, perpendicular, or neither?

 1. $\begin{matrix}y=7x-3\\y=\frac{-1}{6}x+10\end{matrix}$ 2. $\begin{matrix} y=x+9\\y=-x+7\end{matrix}$ 3. $ \begin{matrix}8x-2y=3\\x+4y=-1\end{matrix}$

 4. $\begin{matrix}y=3x+2\\ 2y=6x-10\end{matrix}$ 5. $ \begin{matrix}y=6\\x=-2\end{matrix}$ 6. $\begin{matrix}3y=-x\\3x=y\end{matrix}$

7. Which of the following lines is **parallel** to $=-\frac{5}{7}x+2$ ?

 A.) $y+\frac{5}{7}x=-5$ B.) $y=\frac{5}{7}x$+6 C.) $y=-\frac{7}{5}x-3$ D.) $y-\frac{5}{7}x=9$

8. Which of the following lines is **perpendicular** to $y=\frac{2}{3}x-7$?

 A.) $ y=-\frac{2}{3}x-7$ B.) $y=\frac{3}{2}x+2$ C.) $y=-\frac{3}{2}x+7$ D.) $y=\frac{2}{3}x+1$

9. The line $y=-\frac{1}{2}x+3$ is **perpendicular** to which line?

 A.) $y=-\frac{1}{2}x+6$ B.) $y=2x-3$ C.) $y=\frac{1}{2}x+1$ D.) $y=-2x$

10. Fill in the chart

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| **Type of Solution** | **What is looks like using Elimination/Substitution** | **What is look like using Graphing** |
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*A.REI.C.6 – I can Solve systems of linear equations exactly and approximately (e.g., with graphs), focusing on pairs of linear equations in two variables.*

Solve the system of equations using **substitution.**

 10.) $3x+2y=10$ 11.) $y=3x-4$

 $ x+y=10$ $ -6x+2y=-8$ $ $

 Solve the system of equations using **elimination.**

 12.) $-3x+5y=45$ 13.) $x-2y=16$

$3x+13y=9$$ 2x-4y=8$

 14.) $4x-3y=8$ 15.) $4x+5y=22$

 $2x+y=14$ $5x-y=13$

Solve the system of equations using **any** method.

 16.)$ y=x+2$17.) $3x-2y=1$

 $2x+y=11$ $ 4y=7+3x$

Solve the system of equations by using **graphing**.

 18.) $\begin{matrix}y=2x-1\\y=\frac{1}{2}x+2\end{matrix}$ 19.) $\begin{matrix}-2y=-x-6\\3x-y=7\end{matrix}$

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 20.) $y=3x-4$ 21.) $-3x+4y=24$

 $y=-\frac{1}{2}x+3$ $y=3$

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